AES Puerto Rico
PO Box 1890
Guayama, PR 00785
tel 787 866 8117
fax 787 866 8139
www.aespuertorico.com

November 1, 2018

VIA EMAIL and CERTIFIED MAIL

Nancy Rodríguez, PE (Rodriguez.nancy@epa.gov)
Chief
Multimedia Permits and Compliance Branch

Attn: José A. Rivera, BSCE (Email: Rivera.jose@epa.gov)
Lead Environmental Engineer
Clean Water Act Team

Caribbean Environmental Protection Division
US Environmental Protection Agency, Region 2
City View Plaza, Suite 7000
#48 165 RD Km 1.2
Guaynabo, PR 00968-8069

Re: National Pollutant Discharge Elimination Stormwater Inspection Coal-Fired Steam Power Plant and Marine Cargo Handling Facility MSGP Tracking Number PRR053093

Dear Mrs. Rodríguez and Mr. Rivera:

We acknowledge receipt of the National Pollutant Discharge Elimination ("NPDES") Stormwater Inspection letter ("Inspection letter") received by AES Puerto Rico, L.P. ("AES-PR") on September 18, 2018.

Further to our recent telephone conversation, AESPR hereby respectfully requests an extension of six (6) working days to submit its response to the findings described in the Inspection Letter. AESPR expects to complete its written response and provide the corresponding supporting documentation on or before November 9, 2018.

We thank you in advance for your attention to this matter. If you have any questions or require additional information please feel free contact the undersigned at (787) 866-8117 ext. 2266.

Sincerely,

Hector M. Ávila Caballero
Senior Environmental Coordinator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION 2
Caribbean Environmental Protection Division
City View Plaza II, #48 Carr 165 Ste 7000
Guaynabo, Puerto Rico 00968-8073

090718

Hand Delivery

Mr. Manuel Mata
President
AES Puerto Rico, L.P.
P. O. Box 1890
Guayama, Puerto Rico 00785

Re: National Pollutant Discharge Elimination Stormwater Inspection
Coal-Fired Steam Power Plant and Marine Cargo Handling Facility
MSGP Tracking Number PRR053093

Dear Mr. Mata:

This letter concerns the National Pollutant Discharge Elimination (NPDES) Stormwater Inspection (Inspection) that the United States Environmental Protection Agency (EPA) performed at the AES Puerto Rico, L.P.'s (AES) Coal-Fired Steam Power Plant and Marine Cargo Handling Facility (Facility) on July 16 and 17, 2018. The purposes of the Inspection were to assess whether AES implemented corrective actions to address the findings of violation included in the Notice of Violation (NOV) letter that EPA issued on August 3, 2017 and to evaluate AES's compliance with the NPDES Multi-Sector General Permit for Stormwater Discharges from Industrial Activity (MSGP).

Enclosed please find a copy of the Inspection Report, dated September 4, 2018. In order to further discuss the findings of the Inspection and to seek AES's commitment to address them, Mr. José A. Rivera, Clean Water Act Team Leader, will be presenting the findings included in the Inspection Report during a meeting that you both agreed to hold on September 18, 2018.

AES shall submit its response to each of the findings included in the Inspection Report within forty-five (45) days of receipt of this letter.

Please be informed that issuance of this letter and the performance of the meeting shall not be deemed an election by EPA to forego any administrative or judicial action for penalties, fines, or other appropriate relief under Section 309 of the Clean Water Act (CWA), 33 U.S.C. § 1319, which resulted from EPA's evaluations and investigations of AES's compliance with the CWA.

If you have any questions concerning the above, please contact Mr. Rivera at (787) 977-5887, or via email at rivera.jose@epa.gov.

Sincerely,

Nancy Rodríguez, P.E.
Chief
Multimedia Permits and Compliance Branch

Enclosure

cc: Ángel Meléndez, EQB (via email)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION 2
CARIBBEAN ENVIRONMENTAL PROTECTION DIVISION
MULITMEDIA PERMITS AND COMPLAINCE BRANCH

Industrial Facility
NPDES Stormwater Inspection

AES PUERTO RICO, L.P.

P. O. Box 1890, Guayama, Puerto Rico 00785
Telephone Number: (787) 866-8117
Facsimile Number: (787) 866-8139
Web Site: www.aespuertorico.com

COAL-FIRED STEAM POWER PLANT AND MARINE CARGO HANDLING DOCK
Road PR-3, Km. 142, Jobos Ward, Guayama, Puerto Rico 00784
Coordinates: Latitude 17° 56' 42" N; Longitude 66° 09' 02" W

Sections 301(a) and 402 of the Clean Water Act
NPDES Regulation: 40 C.F.R. Part 122

NPDES Permit Number: PRR053093

Inspection Dates: July 16-17, 2018

Participating Personnel:

U.S. EPA:
José A. Rivera, BSCE, Lead Environmental Engineer
Clean Water Act Team

AES Puerto Rico, LP:
Héctor Ávila, Senior Environmental Coordinator
Pedro Labayén, Stormwater Coordinator

Inspection Report Prepared by:
José A. Rivera, BSCE
Lead Environmental Engineer
Clean Water Act Team
9/4/18
Date

Inspection Report Approving Officer:
Nancy Rodríguez, P.E.
Chief
Multimedia Permits and Compliance Branch
9/4/18
Date

1. INTRODUCTION

This Inspection Report includes findings and observations concerning the National Pollutant Discharge Elimination System (NPDES) Stormwater Inspection (Inspection) conducted by Lead Environmental Engineer and Enforcement Officer, José A. Rivera (EPA Inspector), of the United States Environmental Protection Agency's (EPA) Caribbean Environmental Protection Division (CEPD) at the AES Puerto Rico, L.P. (AES) coal-fired steam power plant ("Facility" or "Plant") located in Guayama, Puerto Rico.[1]

Upon showing of credentials to the guard on-duty, the EPA Inspector was allowed entry into the Facility to perform the Inspection pursuant to the authority in Section 308(a) of the CWA. The purposes of the Inspection were to:

1) assess whether AES implemented corrective actions to address the findings of violation included in the Notice of Violation letter that EPA issued on August 3, 2017 (the "NOV Letter");[2] and

2) evaluate AES's compliance with the NPDES Multi-Sector General Permit for Stormwater Discharges from Industrial Activity (MSGP).

The first day of the Inspection took place on Monday, July 16, 2018, from 12:25 pm to 6:30 pm, local time. The EPA Inspector focused the first day of the Inspection on Facility's records review, and did not conduct a Facility walkthrough.

The second day of the Inspection took place on Tuesday, July 17, 2018, from 8:45 a.m. to 12:00 p.m., local time. The EPA Inspector focused the second day of the Inspection on the completion of the Facility's records review and performed a walkthrough of the Agremax Pile and outfall 002. Dry weather and sunny skies prevailed during the walkthrough of the Facility.

The following employees represented AES during the Inspection:

- First Day: Mr. Héctor M. Ávila, Senior Environmental Coordinator; and Mr. Pedro Labayén (via telephone), Stormwater Coordinator; and

- Second Day: Mr. Ávila, Mr. Labayén, Mr. Carlos M. González, Coal Combustion Products Leader, and Winston R. Esteves, Environmental Consultant.[3]

---

[1] A walkthrough of the AES marine cargo handling dock (the "Dock") was not performed during the Inspection. However, a review of records pertaining to Outfall 001 was performed. Outfall 001 is located at the Dock.

[2] AES sent its response to the NOV Letter by letter dated August 25, 2017.

[3] Other AES personnel participated in the Inspection Exit Meeting, which was conducted at the end of the second day of the Inspection. The AES personnel included Mr. Elías Sostre, Operations Manager and Rafael Quintana, Maintenance Manager. A copy of the Exit Meeting attendance list was placed in the Facility's NPDES records retained at CEPD.

2. AES PUERTO RICO, L.P.

AES is a for-profit corporation organized under the laws of the State of Delaware. AES was registered in the Department of State of the Commonwealth of Puerto Rico on August 9, 1999, under registration number 11062.[4] On or about November 2002, AES began to operate its Facility, which is located in the municipality of Guayama, Puerto Rico.

3. COAL-FIRED STEAM ELECTRIC POWER PLANT

The Facility site is a gated 84-acre parcel of land and leveled above the 100-year flood elevation. The Facility is bordered to the north by TAPI Puerto Rico, Inc., a former pharmaceutical facility, and vacant lands owned by the Puerto Rico Land Administration; to the east by Chevron Phillips Chemical Puerto Rico Core, Inc., a former petrochemical complex; to the south by wetlands and Las Mareas Bay; and to the west by AES Ilumina, LLC, a photovoltaic power generation complex.

The Plant is mainly comprised of employee parking facilities; two (2) coal-fired electric power generation units that host two (2) electric generators; an above-ground coal storage pile; a limestone storage dome; a CCR storage pile; an office building; material and equipment storage buildings; four (4) water retention ponds known as the "Coal Pile Runoff Pond," the "Storm Water Runoff Pond," the "Patillas Channel Pond," and the "Make-up Water Pond;" a cooling tower; water treatment facilities; and contaminated and non-contaminated storm water collection, conveyance and discharge systems.[5] The primary operations at the Facility are best described by the Standard Industrial Classification (SIC) Code 4911.[6]

The Facility has three (3) regulated stormwater discharge points into surface waters designated as Outfall 001, Outfall 002 and Outfall 003. Outfall 001 conveys stormwater associated with industrial activity from the Dock into Las Mareas Bay. Outfall 002 conveys stormwater associated with industrial activity from portions of the west and southwest areas of the Facility into wetlands. Outfall 003 conveys stormwater associated with industrial activity from the Storm Water Pond's overflows and nearby areas, such as the heavy equipment maintenance shop and open yards, into wetlands.[7]

4. MULTI-SECTOR GENERAL PERMIT FOR STORMWATER DISCHARGES FROM INDUSTRIAL ACTIVITY

On June 4, 2015, EPA re-issued the MSGP, which is commonly referred to as the "2015 MSGP." The MSGP became effective on June 4, 2015 and expires on June 4, 2020.[8]

---

[4] Source: http://www.estado.gobierno.pr

[5] Generation: 525 megawatts (gross production) and 454 megawatts (net production).

[6] SIC Code 4911 includes establishments engaged in the generation, transmission, and/or distribution of electricity or gas or steam.

[7] The EPA Inspector did not visit Outfall 001 during the walkthrough of the Facility.

[8] EPA issued AES the 2008 MSGP Tracking Number PRR05BL65 for the Facility. EPA issued a new tracking number (PRR05093) under the 2015 MSGP.

Among others, the MSGP required operators of facilities with storm water discharges associated with industrial activity to prepare and implement a SWPPP, prepare and submit a complete and accurate Notice of Intent (NOI), conduct inspections, perform visual examination of storm water discharges, perform benchmark monitoring, maintain records on-site, and prepare and submit reports to EPA. Subsector O.1 of the MSGP includes specific requirement for the steam electric generating facilities, such as the Facility.

AES filed a NOI, and obtained MSGP coverage beginning on October 3, 2015. The MSGP tracking number assigned to the AES was PRR053093.

5. GUIDANCE DOCUMENT FOR RELIEF AFTER HURRICANE IRMA AND MARIA

On December 21, 2017, EPA issued a document entitled "Guidance and Temporary Requirements for Post Hurricanes Recovery Efforts Applicable to Permittees with Coverage under the NPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity in Puerto Rico" (Guidance Document). The purpose of the Guidance Document was to advise permittees with coverage under the MSGP located in the Commonwealth of Puerto Rico, that as a result of Hurricanes Irma and Maria (Hurricanes), EPA was willing to provide temporary relief to parties that were unable to meet certain requirements and conditions included in the MSGP.

EPA indicated in the Guidance Document that EPA expected that permittees will continue to follow and comply with the MSGP requirements (i.e. implementation of control measures) and conditions (i.e. performance of inspections and corrective actions) to the fullest extent practicable, and will continue to keep those records (i.e. inspection reports, stormwater pollution prevention plan) that are necessary to satisfy the record-keeping requirements of the MSGP. Also, permittees, to the best of their ability, were expected to submit records, as required by the MSGP, to EPA and the Environmental Quality Board (EQB) of Puerto Rico, when applicable, using whatever services (i.e. mail hand-delivery, electronic mail) available. Further, permittees should have taken, and should continue to take, all reasonable steps to minimize and prevent any discharge of pollutants which had or has a reasonable likelihood of adversely affecting human health or the environment.

The EPA Inspector sent to AES the Guidance Document via electronic mail on December 21, 2017, and Mr. Ávila and Mr. Labayén confirmed receipt of the Guidance Document during the Inspection.

6. ENTRY MEETING

Upon showing of credentials to Mr. Ávila at the AES office building, the EPA Inspector proceeded to conduct the entry meeting of the Inspection. The EPA Inspector explained Mr. Ávila the purpose of the Inspection (see above), the records to be reviewed, and the expected areas of the Facility to be visited during a walkthrough.

7. REVIEW OF RECORDS

The EPA Inspector performed a review of the records that AES retains at the Facility on the entire first day of the Inspection, and completed such review during the second day of the Inspection prior to conducting the walkthrough of the Facility.[9]

The following includes findings, comments and areas of concern resulting from the review of the records. It is noted that the review of the records follows the order of the requirements and conditions included in the MSGP.

a. *Employee Training* – Part 2.1.2.8 of the MSGP indicates that the permittee must train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your stormwater pollution prevention team.

   Findings: AES did not conduct employee training in 2017 and 2018. The employee training that AES provided in 2016 did not include field personnel responsible for the installation, maintenance, and/or repair of controls, such as those individuals that are responsible for the implementation of the Facility's dust control activities.

b. *Routine Facility Inspections* – Part 3.1.2 of the MSGP indicates that the permittee must document the findings of the facility inspections and maintain the report with the SWPPP, as required in Part 5.5 of the MSGP.

   The EPA Inspector reviewed the routine facility inspection documentation for the January 1, 2017 to June 30, 2018 period. Specifically, the EPA Inspector review documents entitled "Storm Water Industrial Routine Facility Inspection Form" that AES used to document the routine facility inspections. These forms were dated March 14, 2017, March 23, 2017, May 31, 2017, August 11, 2017, November 13, 2017, February 27, 2018, and May 14, 2018.

   Finding: EPA Inspector found that the forms indicated above were not signed and certified by an AES official, as required in Appendix B, Subsection 11 of the MSGP. Rather, the forms were signed and certified by the inspector that performed the routine facility inspections.

   Additional findings are presented below concerning the facility inspection documentation.

   1) March 23, 2017 Inspection – The inspection was performed during wet weather, and the Storm Water Industrial Routine Facility Inspection Form indicates that:

      a) a diversion system will be constructed as an additional erosion control at that drainage area;[10] and

[9] The EPA Inspector also performed reviews of AES records in EPA's position prior and after the Inspection.
[10] See Stormwater Sample Point 002.

b) an evaluation of the storm water drainage has been performed in order to reduce the potential sedimentation at outfall 002, and a diversion system has been proposed in order to address erosion potential from the road located south from the Agremax pile.[11]

Finding: The EPA Inspector observed during the walkthrough of the Facility that a diversion system (speed bump) was installed near the metal grate associated with Outfall 002. The inclination of the speed bump will divert runoff into a vegetated area near outfall 002.

2) May 30, 2017 Inspection – The Storm Water Industrial Routine Facility Inspection Form indicates that:

a) a segment of the silt fence located north of the coal pile storage pile needed replacement;[12] and

b) sediment accumulation at the Sediment Trap and Concrete Swale.

Findings: The AES inspector did not indicate the specific location, the length of the affected area, and the expected timeframe to address his finding concerning the silt fence. The AES inspector did not mention whether AES constructed the diversion system described in the previous routine facility inspection, and the conditions he observed of this runoff diversion structure.

3) August 11, 2017 Inspection – The Storm Water Industrial Routine Facility Inspection Form indicates that:

a) tracking of sediment by vehicles from an adjacent public dirt road to the plant entrance has been affecting benchmark compliance at this point. An analysis of corrective action will be performed by an external contractor to mitigate the problem;[13]

b) a segment of the silt fence located north of the coal storage pile was replaced. Silt fence installed west of the coal pile needed replacement. A notification was performed and new silt fence was ordered;[14]

c) a sediment trap was cleaned on July 31, 2017;

d) a corrective action evaluation will be performed by an external contractor to reduce or eliminate the discharge of vehicle tracked solids through outfall 002 and get the plant into compliance with the benchmark parameter.[15]

---

[11] See Additional Control Measures.
[12] See Super Silt Fence.
[13] See Stormwater Sampling Point Outfall 002.
[14] See Super Silt Fence.
[15] See Additional Control Measures.

The AES inspector documented that the concrete channel was cleaned on July 23, 2017, per the finding documented during the May 30, 2017 routine facility inspection. Also, the AES inspector documented that the sediment trap was cleaned.

Findings: It is unclear which silt fence area of the coal storage pile was replaced and which one remains in need of replacement. The Storm Water Industrial Routine Facility Inspection Form did not include a timeframe to address the finding. AES did not make available a written evaluation of an external contractor to reduce or eliminate the discharge of vehicle tracked solids through outfall 002.

4) November 13, 2017 Inspection – The inspection was performed during wet weather, and the Storm Water Industrial Routine Facility Inspection Form indicates that:

   a) the sediment trap required maintenance and sediment removal;

   b) the concrete swale required maintenance and sediment removal; and

   c) a corrective action evaluation will be performed by an external contractor to reduce or eliminate the discharge of vehicle tracked solids through outfall 002 to bring the plant into compliance with the benchmark parameter.[16]

   Findings: The AES inspector did not indicate the specific locations within the concrete swale that required maintenance. AES did not make available a written evaluation of an external contractor to reduce or eliminate the discharge of vehicle tracked solids through outfall 002.

5) February 27, 2018 Inspection – The Storm Water Industrial Routine Facility Inspection Form indicates that:

   a) a corrective action to reinstall the silt fence must be completed;

   b) the sediment trap required maintenance and sediment removal; and

   c) the concrete swale required maintenance and sediment removal.

   Findings: The AES inspector did not indicate the specific locations within the concrete swale that required maintenance. The AES inspector did not provide a timeframe for the maintenance and sediment removal.

6) May 14, 2018 Inspection – The Storm Water Industrial Routine Facility Inspection Form indicates that:

   a) the silt fence was affected by Hurricane Maria, and a corrective action to re-install the silt fence must be completed; and

[16] See Additional Control Measures.

b) AES was working on a corrective action to reduce or eliminate the discharge of vehicle tracked solids through outfall 002 to bring the plant into compliance with benchmark parameter. A hydrologic analysis from the affected area has been performed, including additional or potential plant stormwater storage capacity. Professional recommendations and different alternatives will be provided and evaluated to comply with the MSGP 2015 Permit.[17] The AES inspector documented, once again, the finding about the silt fence, which was observed and documented during the previous routine facility inspection.

c. *Quarterly Visual Assessment of Stormwater Discharges* – Part 3.2.2 of the MSGP indicates that the permittee must document the results of the visual assessments and maintain the documentation onsite with the SWPPP, as required in Part 5.5 of the MSGP. The EPA Inspector performed a review of the quarterly visual assessment of stormwater discharges documentation for the January 1, 2017 to June 30, 2018 period.

For the January to March 2017 quarterly period, samples were taken for all three outfalls on March 23, 2017. For the April to June 2017 quarterly period, samples were taken for Outfall 001 on April 24, 2017, and for Outfall 002 and Outfall 003 on April 26, 2017. For the July to September 2017 quarterly period, samples were taken for all three outfalls on August 3, 2017.

Findings: For the October to December 2017 quarterly period, all samples were taken for all three outfalls on November 13, 2017, but the amount of rain precipitation was not written in the documentation. For the January to March 2018 quarterly period, AES did not take any samples. Documentation supporting the rationale for not taking the samples was not developed.

The EPA Inspector reviewed the rain precipitation data recorded by AES for the January to March 2018 quarterly period. In addition, the EPA Inspector reviewed the Rain Gauge Standard Operating Procedure (Rain Gauge SOP), originally issued on July 19, 2012, and revised on May 9, 2017. AES based its Rain Gauge SOP on the use of automatic samplers located at all three sampling points.

Findings: Based on the rain data and the Rain Gauge SOP, a sample should have been taken at Outfall 001 on February 12, 2018.[18] For the April to June 2018 quarterly period, AES took samples at all three outfalls on April 26, 2018; however, the documentation that AES provided during the July 16, 2018 review of records was not signed. The documentation was signed on July 17, 2018, the second day of the Inspection, and it was shown to the EPA Inspector during the review of records.

[17] See Additional Corrective Action.

[18] On February 12, 2018, AES recorded rain precipitation of 0.15 inches at 4:00 pm. Similarly, on February 28, AES recorded a rain precipitation of 0.18 inches at 5:30 pm. Mr. Labayén indicated that the three automatic samplers were damaged by Hurricane Maria and had not been installed at the Facility. He also indicated that he has been taken the storm water discharge samples manually.

d. *Corrective Actions*[19] – Part 4.4 of the MSGP indicates that the permittee must document the existence of any of the conditions listed in Part 4.1 (conditions requiring SWPPP review and revision to ensure effluent limits are met) or Part 4.2 (conditions requiring SWPPP review to determine if modifications are necessary) of the MSGP within 24 hours of becoming aware of such condition. Part 4.4 of the MSGP requires that the corrective action documentation be signed and certified in accordance with Appendix B, Subsection 11 of the MSGP.

The EPA Inspector performed a review of five (5) corrective actions documents that AES prepared in 2017.

Finding: The corrective action documents were not signed and certified, as required in Part 4.4 of the MSGP.

1) The corrective action documentation, dated April 12, 2017, indicates that a diversion of stormwater runoff from unpaved and heavy truck entrance road and installation of drain guards were completed on April 22, 2017. This corrective action is based on the finding documented in the Storm Water Industrial Routine Facility Inspection Form that AES prepared for the routine facility inspection conducted on March 14, 2017.

   Finding: During the review of the SWPPP, which was revised on April 2017, the EPA Inspector could not determine whether AES revised the SWPPP to include the new controls implemented as a result of the corrective action.

2) The corrective action documentation, dated July 1, 2017, indicates that a replacement of silt fence in areas of the coal pile was completed on September 8, 2017. This corrective action is based on the finding documented in the Storm Water Industrial Routine Facility Inspection Form that AES prepared for the routine facility inspection conducted on May 30, 2017.

   Findings: The corrective action was implemented beyond the timeframe established in Part 4.3.2 of the MSGP. AES did not send to EPA a notification of its intention to exceed 45-day deadline established in Part 4.3.2 of the MSGP, the rationale for an extension of time and a completion date.

[19] Part 4.3.2 of the MSGP established the subsequent actions that a permittee shall take to complete corrective actions. The corrective action must be completed before the next storm event, if possible, and within 14 calendar days from the time of discovery of the corrective action condition. If it is infeasible to complete the corrective action within 14 calendar days, the permittee must document why it is infeasible to complete the corrective action within the 14-day timeframe. Also, the permittee must identify a schedule for completing the work, which must be done as soon as practicable after the 14-day timeframe but no longer than 45 days after discovery. If the completion of corrective action will exceed the 45-day timeframe, the permittee may take the minimum additional time necessary to complete the corrective action, provided that the permittee notify the EPA of its intention to exceed 45 days, the rationale for an extension, and a completion date, which must also be included in the corrective action documentation. Where the corrective actions result in changes to any of the controls or procedures documented in the SWPPP, the permittee must modify the SWPPP accordingly within 14 calendar days of completing corrective action work.

3) The corrective action documentation, dated July 21, 2017, indicates that the installation of the diversion berm extension at gate #3 truck entrance was completed on August 8, 2017; the removal of vegetative material from the stormwater pond was completed on September 8, 2017; and three additional sprinklers were installed on August 24, 2017.

   The documentation mentioned soils stabilization with crushed stone in four different areas of the Facility (e.g., cooling tower). This corrective action is based on the finding documented in the Storm Water Industrial Routine Facility Inspection Form that AES prepared for the routine facility inspection conducted on August 11, 2017.

   Findings: The documentation did not provide a completion date for the soil stabilization. AES did not document the findings leading to this corrective action in any of the Storm Water Industrial Routine Facility Inspection Forms that AES prepared prior to the routine facility inspection conducted on August 11, 2017.

4) The corrective action documentation, dated July 31, 2017, indicates that a stormwater concrete channel repaired was completed on July 21, 2017. This corrective action is based on the finding documented in the Storm Water Industrial Routine Facility Inspection Form that AES prepared for the routine facility inspection conducted on March 23, 2017, July 21, 2017, and August 11, 2017.

5) The corrective action documentation, dated November 15, 2017, indicates that soils stabilization with crushed stone in four different areas (e.g., cooling tower) of the Facility was established; coal pile regrading and maintenance of buffer zone between pile and stormwater channel was required; and sampling equipment needs repair.

   Findings: The corrective action documentation did not indicate the completion date for coal pile regrading, maintenance of buffer zone and sampling equipment repair and installation. AES did not send to EPA a notification of its intention to exceed 45- day deadline established in Part 4.3.2 of the MSGP, the rationale for an extension of time and a completion date for the placement of operation of the automatic sampling equipment.

6) Mr. Labayen indicated that the sampling equipment is still under repair, and that re-installation of the equipment is unknown. The sampling procedures that AES established in the SWPPP refers to the use of automatic sampling equipment.

   Finding: AES has not taken samples at the sampling point 001 once the sampling equipment became nonoperational.

The EPA Inspector also found that AES documented corrective actions that were not identified in the routine facility inspection documentation. For example, the diversion berm extension that was installed at gate #3 truck entrance; the vegetative material removed from the storm water retention pond; and the three additional water sprinklers that were installed on the Agremax pile and placed in service.

e. *Benchmark Monitoring* – Part 6 of the MSGP indicates that the permittee must collect and analyze stormwater samples and document monitoring activities consistent with the procedures described in Part 6 and Appendix B, Subsections 10-12 of the MSGP, and any additional sector-specific or state/tribal-specific requirements in Parts 8 and 9 of the MSGP, respectively.[20] Part 7 of the MSGP includes the requirements for reporting and recordkeeping.

The EPA Inspector review of the benchmark monitoring records for the four quarters in 2016 and the January to March 2018 quarter, and found that:

1) On February 19, 2016, a stormwater sample was taken at Outfall 001. A chain of custody record was prepared. The laboratory result for Iron was 1.18 mg/L.

2) On February 19, 2016, a stormwater sample was taken at Outfall 002. A chain of custody record was prepared. The laboratory result for Iron was 14.0 mg/L.

3) On February 19, 2016, a stormwater sample was taken at Outfall 003. A chain of custody record was prepared. The laboratory result for Iron was 0.305 mg/L.

4) On April 1, 2016, a stormwater sample was taken at Outfall 001. A chain of custody record was prepared. The laboratory result for Iron was 0.733 mg/L.

5) On April 1, 2016, a stormwater sample was taken at Outfall 002. A chain of custody record was prepared. The laboratory result for Iron was 0.469 mg/L.

6) On April 1, 2016, a stormwater sample was taken at Outfall 003. A chain of custody record was prepared. The laboratory result for Iron was 0.186 mg/L.

   Finding: AES did not take a stormwater sample at Outfall 001 during the July to September 2016 monitoring period. AES representatives indicated that the sample was not taken because the automatic sampling equipment was out of service.

7) On August 13, 2016, a stormwater sample was taken at Outfall 002. A chain of custody record was prepared. The laboratory result for Iron was 0.222 mg/L.

8) On July 25, 2016 and August 26, 2018, stormwater samples were taken at Outfall 003. A chain of custody record was prepared for each sampling event. The laboratory results for Iron were 0.337 mg/L and 4.90 mg/L, respectively.

9) On October 18, 2016, a stormwater sample was taken at Outfall 002. A chain of custody record was prepared. The laboratory result for Iron was 0.222 mg/L.

[20] Table 8.O-1 of the MSGP identifies the parameter for which AES must perform benchmark monitoring. The parameter to be monitored under Subsector O1 is Total Iron, which has a benchmark value of 1.0 mg/L.

10) On October 18, 2016, a stormwater sample was taken at Outfall 003. A chain of custody record was prepared. The laboratory result for Iron was 0.188 mg/L.

11) On October 19, 2016, a stormwater sample was taken at Outfall 001. A chain of custody record was prepared. The laboratory result for Iron was 0.776 mg/L.

12) On March 23, 2017, a stormwater sample was taken at Outfall 002. A chain of custody record was prepared. The laboratory result for Iron was 12.8 mg/L.

13) On April 24, 2017, a stormwater sample was taken at Outfall 001. A chain of custody record was prepared. The laboratory result for Iron was 0.322 mg/L.

14) On April 26, 2017, a stormwater sample was taken at Outfall 002. A chain of custody record was prepared. The laboratory result for Iron was 1.88 mg/L.

15) On August 27, 2017, a stormwater sample was taken at Outfall 002. A chain of custody record was prepared. The laboratory result for Iron was 2.51 mg/L.

16) On November 13, 2017, a stormwater sample was taken at Outfall 002. A chain of custody record was prepared. The laboratory result for Iron was 0.063 mg/L.

17) On April 26, 2018, a stormwater sample was taken at Outfall 002. A chain of custody record was prepared. The laboratory result for Iron was 0.593 mg/L.

The EPA Inspector reviewed the rain data that AES recorded for the January to March 2018 monitoring period, and discussed it with AES representatives during the review of records. Based on the data and explanations provided by AES representatives, a stormwater discharge that could have been sample did not take place thru Outfall 002. Regarding Outfall 001, AES did not have the stormwater sampling equipment in operation to sample any discharge during the January to March 2018 monitoring period.

According to Part 6.2.1.2 of the MSGP, after AES collects four quarterly samples, if the average of the four monitoring values for any parameter does not exceed the benchmark, AES has fulfilled the benchmark monitoring requirements for the parameter for the MSGP term.

The Iron average concentration for the four monitoring values at Outfall 003 was 0.254 mg/L in 2016, which is lower than the benchmark value of 1.0 mg/L. AES representatives indicated that AES ceased performing benchmark monitoring at Outfall 003 based on the results of the average concentration for the four monitoring values.

According with Part 6.2.1.2 of the MSGP, after AES collects four quarterly samples, if the average of the four monitoring values for any parameter exceeds the benchmark, AES must, in accordance with Part 4, review the selection, design, installation, and implementation of the control measures to determine if modifications are necessary to meet the effluent limits in the MSGP, and either:

- make the necessary modifications and continue quarterly monitoring until AES has completed four additional quarters of monitoring for which the average does not exceed the benchmark; or

- make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the technology-based effluent limits or are necessary to meet the water-quality-based effluent limitations in Parts 2.1 and 2.2 of the MSGP, in which case AES must continue monitoring once per year. AES must also document the rationale for concluding that no further pollutant reductions are achievable, and retain all records related to this documentation with the SWPPP developed for the Facility.

Based on Part 6.2.1.2 of the MSGP, AES must review the control measures and perform any required corrective action immediately (or document why no corrective action is required), per Part 4 of the MSGP, without waiting for the full four quarters of monitoring data, when an exceedance of the four-quarter average is mathematically certain. If after modifying the control measures and conducting four additional quarters of monitoring, the average still exceeds the benchmark (or if an exceedance of the benchmark by the four-quarter average is mathematically certain prior to conducting the full four additional quarters of monitoring), AES must again review the control measures and take one of the two actions (see bullets) above.

Table 1 and **Table 2** depict the data that the EPA Inspector reviewed and evaluated to calculate the average concentrations.

Table 1

	Laboratory Results for Iron (mg/L)		
Monitoring Period	Outfall 001	Outfall 002	Outfall 003
January to March 2016	1.18	14	0.305
April to June 2016	0.733	4.69	0.186
July to September 2016	Sample was not taken	0.222 / 0.490	0.337
October to December 2016	0.776	0.222	0.188
January to March 2017	1.64	See table below	Not applicable
Average	4.30/4 = 1.08	19.1/4 = 4.78 19.0/4 = 4.85	1.016/4 = 0.254

Table 2

	Laboratory Results for Iron (mg/L)	
Monitoring Period	Outfall 001	Outfall 002
January to March 2017	1.64	12.8
April to June 2017	0.322	1.88
July to September 2017	Sample was not taken	2.51
October to December 2017	Sample was not taken	0.063
	Average	17.2 / 4 = 4.31

AES recorded rain event of 0.15 inches at 4:00 pm on February 12, 2018, and 0.18 inches at 5:30 pm on February 28, 2018. AES representatives indicated that a discharge event through Outfall 001 resulted from these two recorded rain events.

Findings: The Iron average concentration for the four monitoring values in 2016 and the first quarter of 2017 at Outfall 001 was 1.08 mg/L, which is higher than the benchmark value of 1.0 mg/L.[21] The Iron average concentration for the four monitoring values in 2016 at Outfall 002 was 4.78 mg/L, which is higher than the benchmark value of 1.0 mg/L.[22] A review of the Iron average concentration for the four monitoring values at Outfall 002 was 4.31 mg/L in 2017, which is higher than the benchmark value of 1.0 mg/L. AES has not conducted benchmark monitoring at Outfall 001 after the April to June 2017 monitoring period.

f. *Stormwater Pollution Prevention Plan* – Part 5 of the MSGP requires AES to review and update the SWPPP to implement all provisions of the MSGP prior to submitting the NOI. The EPA Inspector performed a partial review of the SWPPP. The following comments address the review:

A copy of the Stormwater Pollution Prevention Plan (SWPPP) was available at the Facility. The SWPPP was last updated on April 20, 2017, and signed and certified by the Plant Manager. Part III.F (Sampling Data) of the SWPPP refers to stormwater discharge sampling data collected during 2008.

Findings: The SWPPP does not include an updated selection, design, installation, and implementation of the control measures to determine to address Iron at Outfall 001

[21] The benchmark value included in Part O1 of the MSGP has two decimal places. The EPA Inspector used the mathematical decimal rule and calculated the standard deviation, which was 2.54

[22] As indicated elsewhere in this Report, AES sampled Outfall 002 twice during this monitoring period. This average calculation takes into account the lowest laboratory result (0.222 mg/L) for the July to September 2016 monitoring period.

and Outfall 002. The Pollution Prevention Team Members list in Worksheet 1 of the SWPPP has not been updated.[23]

g. *Annual Report* – Part 7.5 of the MSGP requires AES to submit an Annual Report to EPA electronically, per Part 7.2 of the MSGP, by January 30th for each year MSGP coverage containing information generated from the past calendar year. The EPA Inspector performed a review of the annual reports that AES prepared and submitted in 2017 and 2018, and the EPA Integrated Compliance Information System (ICIS) on July 31, 2018.

The EPA Inspector found that AES submitted to EPA an electronic annual report covering the January 1 to December 31, 2017 reporting period. This annual report was submitted on January 30, 2018.

The EPA Inspector did not find in ICIS the annual report that AES was required to submit for the October 1, 2015 to December 31, 2016 reporting period.

The AES representatives provided to EPA two documents entitled "MSGP 2016 Annual Report" and "MSGP 2017 Annual Report". The MSGP 2017 Annual Report contains the same information that the EPA Inspector found in ICIS for the annual report that AES submitted on January 30, 2018.

h. *Other Comments on the Review of Records*

As indicated elsewhere in this Report, the EPA Inspector performed review of records at the Facility. Nonetheless, the EPA Inspector performed further reviews of records it had obtained from AES prior to and during the Inspection.

The Stormwater Monitoring Standard Operating Procedure was originally issued on April 13, 2015, and updated on March 29, 2017. This procedure was based on the use of automatic samplers for all three outfalls.

Finding: The Procedure does not discuss manual monitoring, and has not been updated based on the MSGP.

8. WALKTHROUGH OF THE FACILITY

Upon completion of the review of records, the EPA Inspector proceeded to perform the walkthrough of the Facility on July 17, 2018. The EPA Inspector was accompanied by Mr. Ávila, Mr. Labayén, Mr. Estevez, and Mr. González. The areas of the Facility visited were the roadway from the office building to the CCR storage pile, the CCR storage pile and the Outfall 002.

The following describes the observations and the results of the interviews that the EPA Inspector made during the walkthrough:

[23] For example, the Maintenance Manager no longer works at the Facility. Also, the Plant Manager is not part of the Team.

a. *Ouftall 002* – **Picture 1** below depicts the conditions of Outfall 002.

Picture 1

Findings: It was confirmed that the automatic sampling equipment was not available. The sampling point for Outfall 002 lacked good housekeeping, as it contained debris, sediments, vegetation and other floating materials.The discharge location into wetlands lacked good housekeeping. See **Picture 2** below depicting this observation.

Picture 2

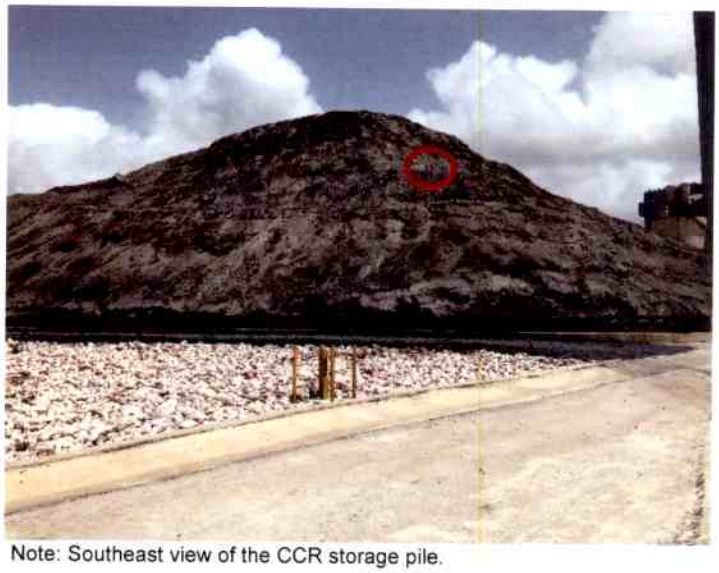
b. *Agremax Pile*

The EPA Inspector walked along the ground areas on the south, east, and limited areas of south-east of the Agremax pile. Also, the EPA Inspector walked along the principal access road to the highest point of the storage pile, and returned to the

ground thru a new access. The following includes findings and observations resulting from the walkthrough of the Agremax pile.

Finding: During the walkthrough, the EPA Inspector did not observe any spraying nozzles in operation to control dust. Mr. González indicated that three (3) of the nine (9) nozzles were undergoing repairs or replacement. **Picture 3** and **Picture 4** are examples that depict this observation.

Picture 3



Note: Southeast view of the CCR storage pile.

Picture 4

Note: Top of CCR storage pile looking towards the east side of the Facility.

The accumulation and storage at Agremax pile expanded to the west side of the pile to a point in which the pile is in direct contact with the storage dome. **Picture 5** depicts this observation.

Picture 5

Note: The EPA Inspector could walk between the storage pile and the dome during previous walkthroughs of these areas.

Finding: The super silt fence placed over the gabion structure along the east side of the Agremax pile was in disrepair. **Picture 6** depicts this observation.

Picture 6

Mr. González indicated that the approximate accumulation at the CCR storage pile at the time of the walkthrough was 410,000 tons, and that AES exported to the State of Florida approximately 35,000 tons in March 2018, 35,000 tons in April 2018, and 36,000 tons in May. He further indicated that the final disposition of the CCR was placed in a landfill operated by a company named Waste Management.

Findings: Most of the top areas of the CCR storage pile were not wet, covered with small particles, and dust was emitting into the air. Also, a large portion of the slopes on the north, west and south areas of the Agremax pile were not wet. **Picture 7** provides an example depicting these observations.

Picture 7

Note: This picture faces the west and southwest slopes.

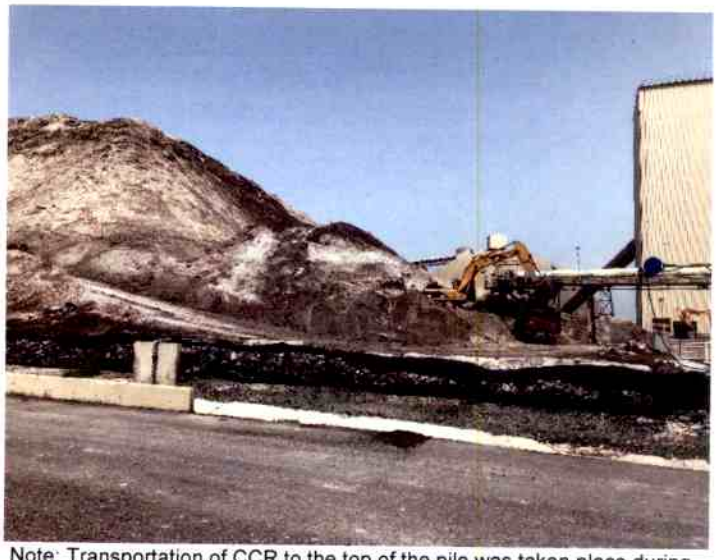
Findings: The berms located along the roadway to the top of the Agremax pile were observed with thin and loose Agremax, and very dry. The Inspector observed dust emission when heavy equipment transited thru the roadway. **Picture 8** depicts a segment of a berm with dry and loose Agremax.

Picture 8

Note: This picture also depicts the southeast side of the storage pile and a portion of the outfall 002 drainage area. This picture was taken from the highest portion of the storage pile.

AES added a second roadway at the pile that runs westbound along the north side of the pile. The entryway is on the east side, and shown on **Picture 9**.

Picture 9



Note: Transportation of CCR to the top of the pile was taken place during the walkthrough of the storage pile.

A water-mounted tank truck was observed spraying water in areas where the CCR was being deposited at the top of the storage pile. **Picture 10** depicts the truck, a spraying nozzle (not in service), and loose and dry CCR at the top of the storage pile. **Picture 11** depicts a spraying nozzle (not in service); and dry, loose and small CCR particles at the top of the storage pile. **Picture 12** depicts the added roadway on the northwest side, a slope showing dry conditions, the coal pile and the dome.

Picture 10

Note: Spraying nozzle was not spraying water.

Picture 11

Note: Spraying nozzle was not spraying water.

Picture 12

Note: Spraying nozzle was not spraying water.

The EPA Inspector experienced a lot of CCR dust emissions on his skin, face and eyes during his walkthrough of Agremax pile.

c. *Diesel Tank Secondary Containment*

Picture 13 depicts the secondary containment.

Finding: The diesel tank secondary containment lack good housekeeping practices, had a light-green colored water accumulation, and Agremax was stockpiled along the top of the concrete berm.

Picture 13

Note: Although not shown on this picture, the EPA Inspector observed two individuals working with what appeared to be a portable pump. See the red-colored hose laying on the ground.

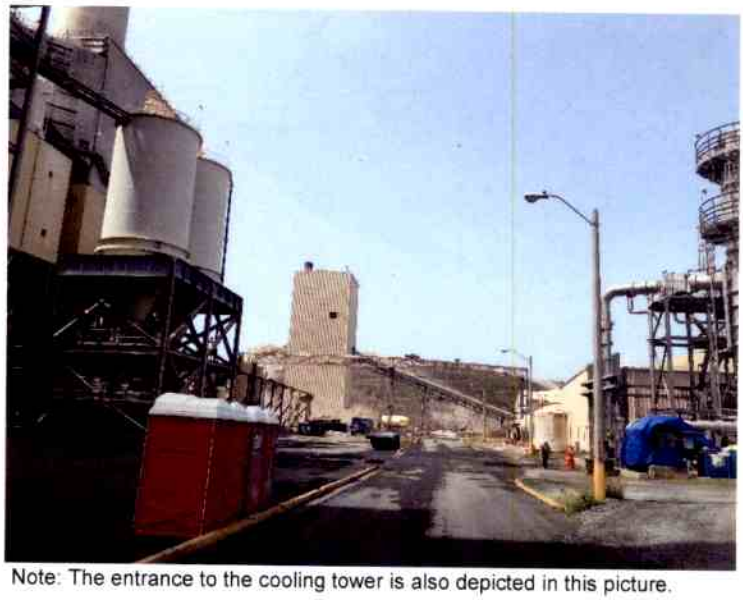
d. Storm Inlet (Catch Basin)

During the culmination of the walkthrough and walking towards the office building, the EPA Inspector observed runoff entering a storm water catch basin (inlet). The catch basin was provided with an inlet protection (e.g. rain guard).

Findings: The inlet was surrounded with significant accumulation of sediment, which resulted from an excavation that was not provided with erosion control. Also, sediment and dust accumulation were observed in the roadway towards the Agremax pile **Picture 14** depicts the observation about the inlet. **Picture 15** depicts the observation about sediment and dust accumulation.

Picture 14

Picture 15



Note: The entrance to the cooling tower is also depicted in this picture.

Findings: The dirt road entrance to the cooling tower had exposed soil and lacked soil stabilization in several areas. The EPA Inspector did not see the sweeper-mounted vehicle in operation during the walkthrough of the Facility.

The EPA Inspector provided Mr. Ávila with an exact and unaltered copy of all the photographs that the EPA Inspector took at the end of the walkthrough of the Inspection.[24]

9. EXIT MEETING

Upon completion of the walkthrough of the Facility, the EPA Inspector met with AES' representatives. The EPA Inspector provided a summary of the areas of concern and findings, which included:

a. lack of good housekeeping at the sampling point for Outfall 002;

b. lack of operation of the sprinklers and observed dust emissions at the Agremax pile;

c. exceedances of the benchmark value for Iron at Outfall 002, and the need to implement additional BMPs, such as collection and re-use of the stormwater first flush during rain events;[25] and

Mr. Sostre asked about EPA's next steps and actions. The EPA Inspector replied with a brief explanation of the administrative options available to EPA under the NPDES

[24] The EPA Inspector used his personal Iphone (Model 8+).

[25] Due to the exceedances of the Iron benchmark concentration at Outfall 002 in the past, the EPA Inspector had discussed with AES representatives the re-use of the stormwater runoff first flush at Outfall 002 as a structural BMP during prior inspections. AES has documented the need to conduct engineering studies to address the benchmark concentration exceedances in routine facility inspections forms.

program. The EPA Inspector also indicated the potential for EPA to request that AES perform a study of the water sprinkler system, including the actual surveying measurement of the Agremax pile.

Finally, the EPA Inspector indicted that next step will be the preparation of an inspection report. Upon completion of the Exit Meeting, the EPA Inspector left the Facility.

End of Report

AES
Puerto Rico

PO Box 1890
Guayama, PR 00785
tel 787 866 8117
fax 787 866 8139
www.aespuertorico.com

November 9, 2018

UPS DELIVERY & ELECTRONIC MAIL

Mr. José A. Rivera
Clean Water Act Team
Caribbean Environmental Protection Division
US Environmental Protection Agency, Region 2
City View Plaza, Suite 7000
#48 165 RD Km 1.2
Guaynabo, PR 00968-8069

Re: National Pollutant Discharge Elimination Stormwater Inspection
Coal-Fired Steam Power Plant and Marine Cargo Handling Facility
MSGP Tracking Number PRR053093

Dear Mr. Rivera:

We acknowledge receipt of your National Pollutant Discharge Elimination ("NPDES") Stormwater Inspection letter ("Inspection Letter") received by AES Puerto Rico, L.P. ("AES-PR") on September 18, 2018. The Inspection Letter provides forty-five (45) calendar days from the receipt to submit a response to each of the findings, (hereinafter referred to as "observations"). As you are aware of, on November 1, 2018, AES requested, and United States Environmental Protection Agency ("EPA") granted, an extension of six (6) working days to submit its response to the findings described in the Inspection Letter.

As requested, AES-PR is hereby addressing each of the observations described within the Inspection letter that comprised a review of the Facility's records and a Facility walkthrough.

I. Introduction

On July 16 and 17, 2018, approximately ten months following the impact of hurricanes Irma and Maria, the EPA performed an Inspection at our facilities to assess whether AES-PR implemented the corrective actions to address certain findings included in the Notice of Violation ("NOV") letter that EPA issued on August 3, 2017[1], (34 days prior hurricane Irma and 47 days prior hurricane Maria). In addition, the inspection evaluated AES's compliance with the NPDES Multi-Sector General Permit for Stormwater Discharges from Industrial Activity ("MSGP").

[1] AES-PR addressed the findings included in the NOV letter and provided response to EPA on August 25, 2017.

In connection with both hurricanes, on December 21, 2017, EPA issued a guidance document ("Post-Hurricanes Guidance Document") to provide temporary relief to parties that were unable to meet certain requirements and conditions included in the MSGP. Albeit the Inspection Letter states that the EPA Inspector sent to AES the Post-Hurricanes Guidance Document via electronic mail on December 21, 2017, we hereby clarify that AES received the document via email on January 5, 2018. See, **Attachment 1**.

To provide additional perspective regarding the effects of hurricanes Irma and Maria over AES' operation, it is worth noting that after 135 days of Maria's landfall, on February 2, 2018 AES was able to reinitiate energy generation at half of its capacity[2]. AES was able to return to its normal generating capacity on March 19, 2018.

The Post-Hurricanes Guidance Document is a commendable effort by EPA to provide temporary relief to the MSGP regulated community. Nonetheless, today it is safe to say that effects of these catastrophic events, as well as the extent of time and efforts it would take to rebuild and return to normal operations across the island, were completely unpredictable.

AES-PR is committed to compliance and we take these matters very seriously. Thus, in tune with the general spirit of the Post-Hurricanes Guidance Document, AES has, to the best of its ability, taken all reasonable steps to prevent any discharge of pollutants associated with the stormwater at its facility while concentrating its efforts for the majority of 2018 in taking its operations back to normal. In this regard, it is worth clarifying that both the Storm Water Runoff Pond and the Coal Pile Runoff Pond, which together retain the majority of the stormwater that gets in contact with industrial activities at the facility, are redirected to the "18 million gallon pond". As EPA is aware of, water in the "18 million gallon pond" is used at the facility for the operation of the plant and is not discharged through any of the regulated stormwater discharge points.

II. **Responses to Findings in the Inspection Letter**

AES-PR's responses herein follow the same order as the observations included in the Inspection letter.

- ***Review of Records. 7.a. Employee Training:***
  - AES did not conduct employee training in 2017 and 2018. The employee training that AES provided in 2016 did not include field personnel responsible for the installation, maintenance, and/or repair of controls, such as those individuals that are responsible for the implementation of the Facility's dust control activities.

AES-PR Response: During 2016 AES conducted stormwater training sessions on February 8th, March 11th and June 14th. These trainings included members of the pollution prevention team and field personnel responsible for the installation, maintenance, and/or repair of storm water controls. Personnel responsible for the implementation of the Facility's dust control activities was

[2] https://www.elnuevodia.com/noticias/locales/nota/aespuertoricooperaamediacapacidad-2395162/

trained on February 8th. Copy of the signed attendance sheets for these trainings is provided herein as **Attachment 2**.

The 2017 stormwater training sessions were programmed for the third quarter of the year. Nevertheless, the impact of hurricanes Irma and Maria on September 2017 compromised telecommunications, access to electric power and other essential services across the Island until past the first quarter of 2018. AES-PR was concentrating in identifying and assessing the damages suffered by the Facility and bringing the Plant back to operation to provide electricity, an essential service to the people of Puerto Rico. Also, because of the lack of cellphone service and internet up until, at least, the beginning of January 2018, the ability to reach the personnel to provide and receive training was hindered; therefore, AES' training schedule was delayed to the point in which the training sessions were postponed for 2018. The well documented damages caused by hurricane María also altered the availability and distribution of resources at the AES-PR facility during the first half of 2018 affecting the year-round working schedules and the overall planning and implementation of training sessions. As a consequence, and to the best of its ability, AES was unable to organize and conduct employee training on or before April 30, 2018.

Nevertheless, AES-PR hereby notes and informs that the 2018 Stormwater and Dust Control trainings were provided on October 8, 2018 and October 23, 2018, respectively. Training included the Dust Control Group and the SWPPP Management. Copy of the signed attendance sheets is provided herein as **Attachment 3**.

- ***Review of Records: 7.b. Routine Facility Inspections***
  - EPA Inspector found that the forms "Storm Water Industrial Routine Facility Inspection Form" that AES used to document the routine facility inspections were not signed and certified by an AES official, as required in Appendix B, Subsection 11 of the MSGP. Rather the forms were signed and certified by the inspector that performed the routine facility inspections.

AES-PR Response: The Quarterly Routine Facility Inspection Form has been revised to include the signature of the Plant Manager or designee. See, **Attachment 4**.

- ***Review of Records. 7.b.1. Routine Facility Inspections***

  - The EPA Inspector observed during the walkthrough of the Facility that a diversion system (speed bump) was installed near the metal grate associated with Outfall 002. The inclination of the speed bump will divert runoff into a vegetated area near outfall 002.

AES-PR Response: We are uncertain as to the purpose of the abovementioned observation; the diversion system is a corrective action which was implemented in accordance with a finding identified in a Routine Facility Inspection on March 23, 2017 and documented in the Routine Facility Inspection Form. However, we provide the following information:

The diversion system installed above the metal grate associated with Outfall 002 intercepts and diverts surface runoff originating upslope so that it will not overrun the grate and exit the facility and any sediments carried by the runoff stream are reasonably expected to be removed by filtration though the vegetated buffer near Outfall 002. This is appropriate because the vegetated buffer will capture the sediment carried on by the first flush in a stormwater event.

- ***Review of Records. 7.b.2. Routine Facility Inspections***
  - The AES inspector did not indicate the specific location, the length of the affected area, and the expected timeframe to address his finding concerning the silt fence. The AES inspector did not mention whether AES constructed the diversion system described in the previous routine facility inspection, and the conditions he observed of this runoff diversion structure.

AES-PR Response: Section 3.1.2 of the 2015 MSGP, *Routine Facility Inspection Documentation*, requires documenting "the findings of your facility inspections and maintain[ing] this report with your SWPPP". We understand that this Section does not require that the inspector indicate, within the documentation requested therein, the specific location, length of the affected area and/or the expected timeframe to address each finding of a facility inspection or provide a description to depict with absolute certainty the location where the finding was identified. To assist the facility's field personnel, which continuously is the same personnel[3] that conducts the *Routine Facility Inspection*, locates and sizes each finding, the corresponding *Corrective Action Documentation* includes a photograph of the finding that is keyed to a specific number assigned on the Facility's Routine Inspection Form and on the facility's Site Map depicting the location of the BMPs. The Facility's Routine Inspection Form Documentation is hereby provided as **Attachment 5**. The Facility's Site Map depicting the location of the BMPs is also provided. See, **Attachment 6.** The method used to indicate the location has proven to be effective throughout the implementation of the MSGP.

Furthermore, we understand that Section 3.1.2 of the 2015 MSGP does not require that the inspector address any previous Routine Facility Inspection Findings or identified corrective actions in the facility inspection documentation. However, we would like to note that, at the time of the May 30, 2017 inspection, the diversion system identified in the March 23, 2017 routine facility inspection had been constructed in a timely manner and was documented through the corresponding corrective action dated April 12, 2017. See, **Attachment 7**.

- ***Review of Records. 7.b.3. Routine Facility Inspections***
  - It is unclear which silt fence area of the coal storage pile was replaced and which one remains in need of replacement. The Storm Water Industrial Routine Facility Inspection Form did not include a timeframe to address the finding. AES did not

[3] Routine Facility Inspections are conducted by Pedro Labayen, PE. Mr. Labayen takes additional personnel with him to conduct the inspection and identifies the findings with them. The findings are then marked on the Routine Facility Inspection Form which is linked to the Facility's Site Map that includes a legend used to identify BMPs with different numbers. The finding regarding a BMP is identified on the map per the number assigned to each BMP.

make available a written evaluation of an external contractor to reduce or eliminate the discharge of vehicle tracked solids through outfall 002.

AES-PR Response: The Routine Facility Inspection form indicates that the **north** section of the coal storage pile was replaced and the **west** section needed replacement and that the new silt fence had been ordered. We understand that Section 3.1.2 of the 2015 MSGP, *Routine Facility Inspection Documentation,* does not require that the inspector indicate the specific location, length of affected area and the expected timeframe to address each finding. To assist the facility's field personnel, which is the same personnel that conducts the *Routine Facility Inspection*, locates and sizes each finding, the corresponding *Corrective Action Documentation* includes a photograph of the finding that is keyed to a specific number assigned on the facility's Site Map which depicts the location of the BMPs. AES completed the replacement of the **west** section of the silt fence on June 30, 2018. See, **Attachment 8**.

After the impacts of Hurricanes Irma and Maria, which occurred about a month after the August 11, 2017 inspection, AES-PR concentrated its efforts in identifying and assessing the damages suffered by the Facility and bringing the Plant back into operation at the soonest - to provide the much needed electric power to the people of Puerto Rico. On the other hand, we hereby inform that AES-PR has contacted a consultant to conduct a hydrologic/hydraulic (HH) study to address in more detail EPA's recommendation to address the Iron concentration being detected at Outfall 002 – to "catching the first flush." The study is aimed at determining the runoff volume resulting from 2, 5 and 10 year-storm events and to make recommendations as to capturing the "first flush"; this, again, as recommended by EPA. The study is expected be completed in about 120 days.

- ***Review of Records. 7.b.4. Routine Facility Inspections***
  - The AES inspector did not indicate the specific locations within the concrete swale that required maintenance. AES did not make available a written evaluation of an external contractor to reduce or eliminate the discharge of vehicle tracked solids through outfall 002.

AES-PR Response: As previously stated, it is our understanding that Section 3.1.2 of the 2015 MSGP, *Routine Facility Inspection Documentation*, does not require that the specific locations of a BMP requiring maintenance be indicated in the documentation related to the routine facility inspection. To assist the facility's field personnel, which is the same personnel that conducts the *Routine Facility Inspection*, locates and sizes each finding, the corresponding Corrective Action Documentation includes a photograph of the finding that is keyed to a specific number assigned on the facility's Site Map which depicts the locations of the BMPs.

In connection with the availability, or lack thereof, of a written evaluation of an external contractor to reduce or eliminate the discharge of vehicle tracked solids through outfall 002, please see response to observation ***7.b.3.*** *above.*

- ***Review of Records. 7.b.5. Routine Facility Inspections***

    - The AES inspector did not indicate the specific locations within the concrete swale that required maintenance. The AES inspector did not provide a timeframe for the maintenance and sediment removal.

AES-PR Response: Again, we understand that Section 3.1.2 of the 2015 MSGP, *Routine Facility Inspection Documentation*, does not require that the inspector indicate in the documentation related to the routine facility inspection the specific location of a finding the expected timeframe to address each finding. To assist the facility's field personnel, which is the same personnel that conducts the *Routine Facility Inspection*, locate and size each finding, the corresponding *Corrective Action Documentation* includes a photograph of the finding that is keyed to a specific number assigned on the Facility's Routine Inspection Form and on the facility's Site Map depicting the location of the BMPs. See, **Attachment 5** & **Attachment 6**.

Even though it is our understanding that nothing is provided in Section 3.1.2 of the MSGP regarding a timeframe for the implementation of a corrective action such as the removal of sediment, AES's SWPPP provides a timeframe for the maintenance and sediment removal as part of the periodic maintenance activities. Also, the SWPPP provides a timeframe as to when the sediment trap, the concrete swale and other BMPs will be maintained and/or cleaned.

- ***Review of Records. 7.b.6. Routine Facility Inspections***
    - The AES inspector documented, once again, the finding about the silt fence, which was observed and documented during the previous routine facility inspection.

AES-PR Response: Although the abovementioned statement is not discussed in the Inspection Letter as a finding we hereby note that the silt fence repair is ongoing.

- ***Review of Records. 7.c. Quarterly Visual Assessment of Stormwater Discharges***
    - For the October to December 2017 quarterly period, all samples were taken for all three outfalls on November 13, 2017, but the amount of rain precipitation was not written in the documentation. For the January to March 2018 quarterly period, AES did not take any samples. Documentation supporting the rationale for not taking the samples was not developed.

AES-PR Response: Precipitation data for the fourth quarter of 2017 was not accessible from the AES weather stations at the time of the visual assessment of the samples because of the lack of network connection that prevented the rain gauge from communicating with the data collection console. Therefore, the rain precipitation was not immediately recorded at the time of the visual assessment. Precipitation data for the indicated period was successfully retrieved at a later time. AES-PR hereby provides the Quarterly Visual Assessment Documentation and its supplement for the October to December 2017 quarterly period. See, **Attachment 9**.

No samples were taken during the first quarter of 2018 because the precipitation during that period did not result in a stormwater event with a measurable amount of precipitation. See further discussion bellow. To evidence that, in fact, no stormwater event occurred we hereby provide AES-PR's Quarterly Visual Assessment Documentation for the above referenced quarter.[4] If there was any visual assessment it would had been documented on AES-PR's Quarterly Visual Assessment Documentation. See, **Attachment 10**.

AES-PR wants to clarify that its rainfall data collection procedure is not based "on the use of automatic samplers located at all three sampling points" as stated on page 8 of the Inspection Letter. AES-PR has two automatic weather stations. Data collected from weather Station 1 is used for the preparation of EPA reports. Station 2 will be used only if there is a data loss or malfunction of Station 1. Station 1 collects weather data and sends it to a console via wireless low power radio. Each weather station contains a rain gauge; when the rain gauge collects a certain quantity of rainfall, it activates the automatic sampler located at Outfall 001, 002 and 003 in order to trigger the collection of a sample. AES has based its Rain Gauge SOP on the use of state-of-the-art wireless, solar powered, automatic weather station technology.

- ***Review of Records. 7.c. Quarterly Visual Assessment of Stormwater Discharges***
  - Based on the rain data and the Rain Gauge SOP, a sample should have been taken at Outfall 001 on February 12, 2018. For the April to June 2018 quarterly period, AES took samples at all three outfalls on April 26, 2018; however, the documentation that AES provided during the July 16, 2018 review of records was not signed. The documentation was signed on July 17, 2018, the second day of the Inspection, and it was shown to the EPA Inspector during the review of records.

AES-PR Response: Regarding the statement that the documentation provided by AES-PR was not signed on July 16, 2018, but was later signed on July 17, 2018, we point out that the abovementioned documentation was signed on July 17, 2018 per the recommendation of EPA's inspector, Mr. José A. Rivera.

During the month of February 2018, the automatic samplers were not operational due to damage caused by hurricane Maria and stormwater discharge sampling was performed manually per Section VIII of the Storm Water Sampling Procedure Protocol (SOP), triggered by rainfall data from the automatic (and Outfall-remote) weather stations during regular daytime work hours (*i.e.*, 8:00 a.m. to 4:00 P.M., Monday to Friday).

Because of the random nature of rainfall distribution, the automatic weather station rain gauge, which is located in the main facility -a mile away from Las Mareas Harbor, where Outfall 001 is located, may have detected rainfall and no precipitation may have occurred in the vicinity of Outfall 001. This is verified when AES-PR personnel inspects the Outfall to corroborate that there was no precipitation. Another possibility is that precipitation may have occurred, but not

[4] The AES-PR Quarterly Visual Assessment Documentation records **all** eight items required by Section 3.2.2 of the 2015 MSGP.

during regular daytime working hours. However, on February 12, 2018 there was no stormwater event that triggered the need to conduct a stormwater sample.

- ***Review of Records. 7.d. Corrective Actions.***
  - The corrective action documents were not signed and certified, as required in Part 4.4 of the MSGP.

AES-PR Response: The corrective action documents used by AES-PR are based on EPA's Additional MSGP Documentation Template (June 4, 2015)[5]and included in the SWPPPs previously submitted to EPA. AES-PR has revised the Corrective Action Documentation to include signature and certification requirements in Part 4.4 of the MSGP. See, **Attachment 11**.

- ***Review of Records. 7.d.1. Corrective Actions.***
  - During the review of the SWPPP, which was revised in April 2017, the EPA Inspector could not determine whether AES revised the SWPPP to include the new controls implemented as a result of the corrective action.

AES-PR Response: The SWPPP revision was completed on March 2017 and signed during April 2017; the installation of the new storm water diversion controls was completed on April 22, 2017 and, therefore, was not included in said revision. Even though the new control was not included in the former revision, please note that such control was constructed and is included in the latest revision of the SWPPP Site Map, which was completed in October 2018, and in the latest revision of the Routine Inspection Form. See, **Attachments 5 & 6**.

- ***Review of Records. 7.d.2. Corrective Actions.***
  - The corrective action was implemented beyond the timeframe established in Part 4.3.2 of the MSGP. AES did not send to EPA a notification of its intention to exceed 45-day deadline established in Part 4.3.2 of the MSGP, the rationale for an extension of time and a completion date.

AES-PR Response: AES-PR notes that the Corrective Actions Documentation form has been revised to clarify completion dates information and AES-PR's notification to EPA including the need to exceed the 45-day timeframe extension under Part 4.3.2 of the MSGP, the rationale for an extension of time and a completion date. See, **Attachment 11**.

- ***Review of Records. 7.d.3. Corrective Actions.***
  - The documentation did not provide a completion date for the soil stabilization. AES did not document the findings leading to this corrective action in any of the Storm Water Industrial Routine Facility Inspection Forms that AES prepared prior to the routine facility inspection conducted on August 11, 2017.

---

[5] EPA's Additional MSGP Documentation Template (June 4,2015) can be found here: https://www.epa.gov/npdes/stormwater-discharges-industrial-activities#summarymsgp

AES-PR Response: The findings leading to the soil stabilization corrective action, originated from an EPA inspection performed on July 21, 2017, and not from a routine facility inspection. Mr. Pedro Labayen documented the findings leading to this corrective action in the August 11, 2017 Routine Facility Inspection Documentation. See, **Attachment 12**. The Corrective Action Documentation was created on the same day that EPA conducted the inspection (July 21, 2017). See, **Attachment 13**. We hereby provide evidence that soil stabilization was completed and documented through photographs on August 31, 2017. See, **Attachment 14**.

- ***Review of Records. 7.d.5. Corrective Actions.***
  - The corrective action documentation did not indicate the completion date for coal pile regrading, maintenance of buffer zone and sampling equipment repair and installation. AES did not send to EPA a notification of its intention to exceed 45-day deadline established in Part 4.3.2 of the MSGP, the rationale for an extension of time and a completion date for the placement of operation of the automatic sampling equipment.

AES-PR Response: The Inspection letter indicates that the corrective action documentation, dated July 31, 2017, specifies that a stormwater concrete channel repair was completed on August 21, 2017[6] and that this corrective action was based on the finding documented in the Storm Water Industrial Routine Facility Inspection Form that AES-PR prepared for the Routine Facility Inspection conducted on March 23, 2017, July 21, 2017 and August 11, 2017. See, Inspection Letter on page 10.

AES-PR would like to point out that the facility inspections conducted on March 23, 2017 and August 11, 2017 do not contain any findings related to the repair of a stormwater concrete channel. AES-PR also points out that there was no Routine Facility Inspection conducted on July 21, 2017 but an EPA Inspection performed by Mr. José A. Rivera. See, **Attachment 15** and **Attachment 12**.

The Inspection Letter also states that the corrective action documentation, dated November 15, 2017, indicates that soils stabilization with crushed stone in four different areas (e.g. cooling tower) of the Facility was established; coal pile regrading and maintenance of buffer zone between pile and stormwater channel was required; and that sampling equipment needs repair.

AES-PR hereby clarifies that the information provided in the Inspection letter to this regard is incorrect. The November 15, 2017 corrective action indicates that the coal pile re-grading and buffer zone maintenance were completed immediately and documented under "Immediate Actions" on the corrective action documentation. See, **Attachment 16**. Additionally, the Corrective Action Documentation does not indicate that sampling equipment needed repair.

On the other hand, AES-PR notes that the corrective actions documentation form has been revised to clarify completion dates information and AES-PR's notification responsibilities to

[6] The Inspection letter indicates that the completion date was July 21, 2017. However, this information is not accurate because the actual completion date was August 21, 2017 as expressed in the corrective action documentation.

EPA (including intentions to exceed the 45-day timeframe extension under Part 4.3.2 of the MSGP, the rationale for an extension of time and a completion date).

- ***Review of Records. 7.d.6. Corrective Actions.***
  - AES has not taken samples at the sampling point 001 once the sampling equipment became nonoperational.

AES-PR Response: AES-PR has not sampled Outfall 001 after the April to June 2017 monitoring period because it was in compliance with the benchmark numerical value.

Sampling equipment repair and installation was completed on October 24, 2018. See, **Attachment 17**.

- ***Review of Records. 7.e.1-6. Benchmark Monitoring.***
  - AES did not take a stormwater sample at Outfall 001 during the July to September 2016 monitoring period. AES representatives indicated that the sample was not taken because the automatic sampling equipment was out of service.

AES-PR Response: Outfall 001 was not sampled during the July to September 2016 monitoring period because there was not a stormwater event that resulted in a measurable amount of precipitation during regular daytime work hours (i.e., 8:00a.m. to 4:00 p.m., Monday to Friday.) Rainfall data for the third quarter of 2016 is provided herein. See, **Attachment 18**. If additional information regarding this data is needed, let us know and we will provide it promptly.

- ***Review of Records. 7.e.7-17. Benchmark Monitoring.***
  - The Iron average concentration for the four monitoring values in 2016 and the first quarter of 2017 at Outfall 001 was 1.08 mg/L, which is higher than the benchmark value of 1.0 mg/L.21 The Iron average concentration for the four monitoring values in 2016 at Outfall 002 was 4.78 mg/L, which is higher than the benchmark value of 1.0 mg/L.22 A review of the Iron average concentration for the four monitoring values at Outfall 002 was 4.31 mg/L in 2017, which is higher than the benchmark value of 1.0 mg/L. AES has not conducted benchmark monitoring at Outfall 001 after the April to June 2017 monitoring period.

AES-PR Response: AES did not conduct benchmark monitoring of Outfall 001 after the April to June 2017 monitoring period because it was in compliance with the benchmark numerical value. AES-PR hereby requests clarification and guidance from the EPA on rounding-off significant figures of laboratory results.

With regards to Footnote 21, included in the Inspection letter, please note that the benchmark value included in Part O1 of the MSGP does not include two decimal places. Rounding off decimals is not a standard method provided in the MSGP to calculate benchmarks. See, Table 8.O.1 of the MSGP.

- ***Review of Records. 7.f. Stormwater Pollution Prevention Plan***
  - The SWPPP does not include an updated selection, design, installation, and implementation of the control measures to determine to address Iron at Outfall 001 and Outfall 002. The Pollution Prevention Team Members list in Worksheet 1 of the SWPPP has not been updated.

AES-PR Response: The 2017 SWPPP did not include additional control measures to address Iron in Outfall 001 because, as stated above, Outfall 001 was in compliance with the benchmark numerical value of 1.0 mg/L. AES-PR has contacted a consultant to conduct a hydrologic/hydraulic (HH) study to address in more detail EPA's recommendation to address the Iron concentration being detected at Outfall 002 – to "catching the first flush." The study is aimed at determining the runoff volume resulting from 2, 5 and 10 year-storm events and to make recommendations as to capturing the "first flush"; this, again, as recommended by EPA. The study is expected be completed in about 120 days.

The Pollution Prevention Team Members list has been updated and it is included in **Attachment 19.**

- ***Review of Records. 7.g. Annual Report.***
  - The EPA Inspector did not find in ICIS the annual report that AES was required to submit for the October 1, 2015 to December 31, 2016 reporting period.

AES-PR Response: The annual report was submitted through ICIS within the applicable timeframe. Documentation evidencing submission is attached. See, **Attachment 20**.

- ***Review of Records. 7.h. Other Comments on the Review of Records.***
  - The Procedure does not discuss manual monitoring, and has not been updated based on the MSGP.

AES-PR Response: Section VIII of the March 29, 2017 version of the SOP includes a discussion regarding manual sampling of outfalls as needed. See, **Attachment 21**.

- ***Walkthrough of the Facility. 8.a. Outfall 002***
  - It was confirmed that the automatic sampling equipment was not available. The sampling point for Outfall 002 lacked good housekeeping, as it contained debris, sediments, vegetation and other floating materials. The discharge location into wetlands lacked good housekeeping.

AES-PR Response: Sampling equipment repair and installation was completed on October 24, 2018. See, **Attachment 17**. Cleaning activities using the vacuum truck and water truck and replacement of stormwater grating drain guards was performed as part of Housekeeping actions at Outfall 002 on October 25, 2018. See, **Attachment 22**. Please note that the SWPPP BMP Matrix has been revised to include weekly inspection and maintenance of stormwater outfalls See, **Attachment 23**.

- ***Walkthrough of the Facility. 8.b. Agremax Pile.***
  - During the walkthrough, the EPA Inspector did not observe any spraying nozzles in operation to control dust. Mr. Gonzalez indicated that three (3) of the nine (9) nozzles were undergoing repairs or replacement.

AES-PR Response: The SWPPP provides for the "use of mobile sprinkler guns and water truck with water cannon at the manufactured aggregate stockpile area" as part of the procedure to minimize the generation of fugitive dust and the tracking of pollutants. (See, March 2017 SWPPP on page 23). As outlined in the EPA-approved Dust Control Plan, water spraying nozzles are activated at night, to wet the Agremax pile while it is inactive so a protective crust forms in preparation for the daytime activities. For practical reasons, the nozzles cannot be activated while the Agremax pile is operational and only the daytime disturbed areas of the Agremax pile *e.g.* access roads and loading / unloading locations, are actively wetted using a water truck. The location of the nozzles available at any time is alternated and supplemented with the water truck to ensure adequate wetting to account for the nozzles that are not in use, so that complete wetting of the Agremax pile, including the area next to the limestone storage dome, is achieved. This procedure complies with the SWPPP requirements and has proven to be effective. Furthermore, the quantity of spraying nozzles to be used at a certain time depends on the condition of the Agremax pile. AES-PR utilizes more or less water spraying nozzles depending on the conditions, identified by AES-PR personnel, of the Agremax pile. The inability to use three of the nine nozzles did not hinder the SWPPP and Dust Control Plan's sediment control purpose- to wet the Agremax pile so a protective crust forms and eliminates or minimizes the production of fugitive dust.

- ***Walkthrough of the Facility. 8.b. Agremax Pile.***
  - The accumulation and storage at Agremax pile expanded to the west side of the pile to a point in which the pile is in direct contact with the storage dome.

AES-PR Response: We are uncertain as to what the objective of this statement is. However, we offer the following response: the fact that the Agremax pile extended to the west side does not negatively affect the control measures included in the SWPPP and the Dust Control Plan to prevent discharges and minimize the generation of fugitive dust.

The Agremax Pile and the storage dome are surrounded by a concrete channel that collects the runoff at the Agremax Pile area. Any rainwater captured in this area goes straight to the concrete channel which directs the water to the Coal-Pile Runoff Pond that collects non-industrial storm water runoff from the Agremax Pile and the limestone storage dome area and it is not discharged through any of the regulated outfalls. Instead, the water goes to the 18 Million Gallon Pond to be further used for operational purposes.

- ***Walkthrough of the Facility. 8.b. Agremax Pile.***
  - The super silt fence placed over the gabion structure along the east side of the Agremax pile was in disrepair.

AES-PR Response: The fabric placed over the gabion structure that hems the Agremax pile is not a super silt fence; it is a geotextile that is used as a secondary dust control measure and reduces the migration of fine particles into the interstices of the gabion rocks. At the time of the inspection, replacement of the geotextile on the outside of the gabion structure observed by the EPA inspector was ongoing. Installation of the new geotextile material over the gabion structure was completed on September 26, 2018. See, **Attachment 24**.

AES-PR would like to note that in the event runoff occurs from the Agremax Pile, the runoff water is collected by the concrete channel that surrounds the Agremax Pile which directs the water to the Coal-Pile Runoff Pond and it is not discharged at any time. Thus, the control measures that prevent a discharge (in this case the concrete channel and the Pond), were not compromised during the period of time in which the gabion rocks were not covered by geotextile material.

- ***Walkthrough of the Facility. 8.b. Agremax Pile.***
  - Most of the top areas of the CCR storage pile were not wet, covered with small particles, and dust was emitting into the air. Also, a large portion of the slopes on the north, west and south areas of the Agremax pile were not wet.

AES-PR Response: As previously explained, water spraying nozzles are activated at night to wet the Agremax pile while it is inactive so a protective crust forms in preparation for the daytime activities. For practical reasons, the nozzles cannot be activated while the Agremax pile is operational and only the daytime disturbed areas of the Agremax pile e.g. access roads and loading / unloading locations are actively wetted using a water truck. Even if not wet, undisturbed crusted areas are not a significant source of fugitive dust. As outlined in the EPA-approved Dust Control Plan, which AES-PR is abiding by, water spraying nozzles are activated at night, to wet the Agremax pile while it is inactive so a protective crust forms in preparation for the daytime activities. This procedure has proven to be effective and complies with the SWPPP requirements. The fugitive dust that might escape while the area is disturbed is not expected to reach Outfalls 002 and 003. The runoff that might be produced by the Agremax pile is collected by the concrete channel that surrounds the Agremax Pile which directs the water to the Coal-Pile Runoff Pond and it is not discharged at any time. The runoff water that is collected in the Coal-Pile Runoff Pond is later transferred to an 18 million gallon pond (no-discharge pond) to be used for industrial operations at the Facility.

- ***Walkthrough of the Facility. 8.b. Agremax Pile.***
  - The berms located along the roadway to the top of the Agremax pile were observed with thin and loose Agremax, and very dry. The Inspector observed dust emission when heavy equipment transited thru the roadway.

AES-PR Response: Dust particles are intrinsically expected to be present on the Agremax access road berms as a result of fallout from moving equipment and constant traffic disturbing the windswept road surface during hot days. As previously discussed, dry surfaces are not necessarily a source of fugitive dust if crusted and not disturbed.

AES-PR has maintained the road berms with the Agremax aggregate to form a barrier from the runoff water and to protect the trucks from the inclined slope of the roadway. The loose Agremax that accumulates along the berms is incidental to the operations within the Agremax pile and the movement of trucks on the roadway. However, AES-PR notes that any stormwater runoff produced by the Agremax Pile goes straight to the concrete channel which directs the water to the Coal Pile Runoff Pond and it is not discharged.

On the other hand, the nature of any dust exposure experienced by the EPA inspector was incidental and occupational in nature as a result of him coming in close proximity to moving equipment. This effect is not expected to cause fugitive dust events capable of polluting a sotormwater discharge through the regulated outfalls at the facility.

- ***Walkthrough of the Facility. 8.b. Agremax Pile.***
    - A water-mounted tank truck was observed spraying water in areas where the CCR was being deposited at the top of the storage pile. Picture 10 depicts the truck, a spraying nozzle (not in service), and loose and dry CCR at the top of the storage pile. Picture 11 depicts a spraying nozzle (not in service); and dry, loose and small CCR particles at the top of the storage pile. Picture 12 depicts the added roadway on the northwest side, a slope showing dry conditions, the coal pile and the dome.

AES-PR Response: This statement is not identified as a finding in the Inspection Letter, however we provide the following response: The SWPPP provides for the "use of mobile sprinkler guns and water truck with water cannon at the manufactured aggregate stockpile area" as part of the procedure to minimize the generation of fugitive dust and the tracking of pollutants. (See, March 2017 SWPPP on page 23). As outlined in the EPA-approved Dust Control Plan, water spraying nozzles are activated at night, to wet the Agremax pile while it is inactive so a protective crust forms in preparation for the daytime activities. For practical reasons, the nozzles cannot be activated while the Agremax pile is operational and only the daytime disturbed areas of the Agremax pile *e.g.* access roads and loading / unloading locations, are actively wetted using a water truck. The location of the nozzles available at any time is alternated and supplemented with the water truck so that complete wetting of the Agremax pile is achieved. This procedure complies with the SWPPP requirements and has proven to be effective.

AES-PR utilizes more or less water spraying nozzles depending on the conditions, identified by AES-PR personnel, of the Agremax pile. The inability to use three of the nine nozzles did not hinder the SWPPP and Dust Control Plan's sediment control purpose- to wet the Agremax pile so a protective crust forms and eliminates or minimizes the production of fugitive dust.

AES-PR notes that any stormwater runoff produced by the Agremax Pile goes straight to the concrete channel which flows the water to the Coal Pile Runoff Pond where it is stored and not discharged, thus it does not reach any of the Outfalls surrounding the Facility.

- ***Walkthrough of the Facility. 8.c. Diesel Tank Secondary Containment.***
  - The diesel tank secondary containment lack good housekeeping practices, had a light-green colored water accumulation, and Agremax was stockpiled along the top of the concrete berm.

AES-PR Response: The accumulation of water observed in the diesel fuel storage tank secondary containment structure was relatively minimal compared with the available spill retention volume and did not effectively hinder the structure's main purpose or capacity of containment of a diesel fuel spill. The accumulation of Agremax along the top of this structure is incidental, limited to the sides abutting the Agremax stockpile and cleaned periodically. The Diesel Tank Secondary Containment was cleaned on October 5, 2018. See, **Attachment 25**.

Additionally, please note that the Diesel Tank Secondary Containment is located within an area surrounded by the concrete channel of the Agremax storage pile. Thus, in the unlikely event of an overfill, the excess water will be conveyed through the concrete channel that flows the water to the Coal Pile Runoff Pond which is a no-discharge pond that collects runoff from the Agremax pile area and is later used for industrial operations in the Facility.

- ***Walkthrough of the Facility. 8.d. Storm Inlet (Catch Basin).***
  - The inlet was surrounded with significant accumulation of sediment, which resulted from an excavation that was not provided with erosion control. Also, sediment and dust accumulation were observed in the roadway towards the Agremax pile.

AES-PR Response: As described in the Inspection letter, the catch basin was equipped with an inlet protection. The catch basin is routinely inspected and maintained per the requirements of Part IV. Section E of the SWPPP. On October 25, 2017 gravel was installed for erosion control at the excavation area. On October 26, 2017 a stormwater drain guard was replaced at the inlet located west of the limestone silos, cleaning activities were performed and stormwater stone bags were installed at the inlet located west of the limestone silos. See, **Attachment 26**.

- ***Walkthrough of the Facility. 8.d. Storm Inlet (Catch Basin).***
  - The dirt road entrance to the cooling tower had exposed soil and lacked soil stabilization in several areas. The EPA Inspector did not see the sweeper-mounted vehicle in operation during the walkthrough of the Facility.

AES-PR Response: The aggregate cover of the facility's unpaved roads is replenished periodically.

The sweeper equipment is not operational and requires replacement. Replacement parts for this equipment are currently unavailable in the market. Meanwhile, paved areas are cleaned with water hoses and the residues removed using a vacuum truck. The Dust Control Plan has been revised to include this alternative control. See, **Attachment 27**.

Gravel installation at the dirt road entrance to the cooling towers was performed on October 26, 2018. See, **Attachment 28**.

III. Conclusion

Finally, AES-PR expects that the documents and information included herein serve to demonstrate the Facility's compliance with the MSGP requirements "to the fullest extent practicable" and "to the best of its ability" during the 12 month period following the impact of Hurricanes Irma and Maria. We remain available to provide any additional documents or information that may be necessary to address EPA's observations within the Inspection letter.

If you have any questions or require additional information please feel free contact me at (787) 866-8117 ext. 2212.

Cordially,

Manuel Mata
President

ATTACHMENT NO. 1

Copy of January 5, 2018 e-mail notifying EPA
Post-Hurricane Guidance Document

Archived: Friday, November 09, 2018 11:57:41 AM
From: Hector Avila
To: Jerry Lucas Marrero; Antonio L. Collazo Bennazar; Pedro Labayen
Subject: FW: 2015 MSGP Permittees - Guidance and Temporary Requirements for Post Hurricanes Efforts
Importance: Normal
Attachments:
2015 MSGP PERMITTEES - GUIDANCE AND TEMPORARY REQUIREMENTS FOR POST HURRICANES EFFORTS.pdf ;

FYI

From: Rivera, Jose [mailto:Rivera.Jose@epa.gov]
Sent: Friday, January 05, 2018 4:52 PM
To: Presidente IIAM <presidente.iiam@gmail.com>; AIDIS Puerto Rico <aidispuertorico@gmail.com>; AIDISPR <eriveraocasio@gmail.com>; Geannette Siberon <g.siberon@yahoo.com>; Rafael Rivera Yankovich <rry@tcmrslaw.com>; cenilda ramirez <Cenilda.Ramirez@tetratech.com>; Jerry Lucas Marrero <jerry.marrero@oneillborges.com>; cfl@mcvpr.com; Jorge J. García-Díaz <jjg@mcvpr.com>; Jose A. Marti <jmarti@technical-consulting.com>; Jose Cepeda <cepedapr@cepedalaw.com>; Cesar Vincenty <cvincenty@vhapr.com>; Axel Medina <axelmedina111@gmail.com>; Eng. Winston R. Esteves <westeves@prtc.net>; plorenzo@psconsultantspr.com; rcolon@caribeenvironmental.com; Javier Velez-Arocho <jvarocho@ecostahlia.com>; raul.zapata@upr.edu; John Whitescarver <John@npdes.com>; Dr. Edgar Hernandez Patino <edgarher@caribe.net>; jaypinero@gmail.com; Juan Carlos Mercado <sanitaria@gmail.com>; Hector L. Sanchez - Cruz <hsanchez@vhapr.com>; ftorres@envirolawpr.com; jarlem@prtc.net; Emilio Colon-Zavala <ecz@eczgroup.com>; edwindortiz@gmail.com; miguelrubio_csp@hotmail.com; Figueroa, Hans X. <hxfigueroa@csagroup.com>; Eugenio Garcia <eugenioegv@yahoo.com>; jimenez_rosario@yahoo.com; ramon.olivero@cemex.com; Hector Avila <hector.avila@aes.com>
Subject: 2015 MSGP Permittees - Guidance and Temporary Requirements for Post Hurricanes Efforts

Dear email recipient,

Attached please find the Guidance Document EPA Region 2 issued to the 2015 MSGP Permittees in Puerto Rico. This Document is intended to address the Post Hurricanes Efforts. This is a public document and as such, you are encouraged to share.

The NPDES Industrial Staff at the Caribbean Environmental Protection Division stands ready to provide compliance assistance and to respond to questions related to this document. You can reach us at (787) 977-5865.

Sincerely,

José A. Rivera, BSCE
Team Leader
Clean Water Act Team
Multimedia Permits and Compliance Branch
US EPA Region 2
Caribbean Environmental Protection Division

ATTACHMENT NO. 2

Signed Attendance Sheets for February 8, 2016 SWPPP and Dust Control SOP Training

AES Puerto Rico

Dust Control SOP Training Attendance

Date: Febrero / 8 / 2016

	Name	Shift/Team	Signature
1	Rafael Bloi	CCP	
2	Victor H Campos	CCP	
3	Francisco [illegible]	M/H	
4	Jose G Santiago	M/H	Jose Santiago
5	Jorge J. Rivera	M/H	
6	Maria P. Cruz Reyes	CCP	
7	Edwin Rivas Cosme	CCP	
8	Victor De Armas	M/H	Victor De Armas
9	Miguel Vazquez	M/H D	
10	Jose A. Calimano	C.C.P.	
11	Roberto Nuñez	C.C.P.	
12	Javier Torres	M/H	
13	Miguel A Roman	M/H	M. Roman
14	Daniel Rodriguez Cosme	CCP	
15	Carlos A. Vazquez Reyes	CCP.	Carlos A Vazquez Reyes
16	Noel O. Lopez	M/H	
17	Euclide Marrero	M/H	
18	Angel L. Santiago Perez	CCP	
19	Oscar X. Diaz	M H	
20	Kenneth Sandin	M H B	
21	Hector M. Ante	EHS	

ATTACHMENT NO. 3

Signed Attendance Sheets for October 8, 2018 and October 23, 2018 Dust Control Trainings

AES Puerto Rico

Multi-Sector General Permit &
Stormwater Pollution Prevention Plan Training

Training Attendance Sheet

Date: February 8, 2016. Time: 4:30 pm

Location: AES Puerto Rico, L.P. Trainers: Carlos Gonzalez / Eitel Figueroa
Pedro E. Laboyen / Hector Avile

No.	Employee Name	Employee Signature	Work Area
1	Rafael Colón		CCP
2	Victor H Campos		CCP
3	Jose Santiago		M.H.
4	Jorge J. Rivera		M H
5	Francisco Cles	M H	
6	Maria E. Cruz Reyes	CCP	
7	Edwin Torres Castro		CCP
8	Victor Bo Arnaes		M H
9	Miguel Vázquez Ortiz		MH
10	JOSE A. Calimano		C.C.P.
11	Roberto Núñez		C.C.P.
12	Javier Torres		M/H
13	Miguel A Ruman		M/H
14	Daniel Rodriguez Gonzalez		CCP
15	Carlos A Vazquez Reyes		CCP.
16	Noel O. López		M/H

Attendance Sheet

Activity: SWPPP Training
Date/Time: 8/oct/18 11:00
Presented by/Team: Héctor M. Avila
Imparted to/Team: AES Leaders

AES Puerto Rico

Name	Company	Signature
Carlos González	AES PR	
Obed Santos	AES	
Eidel Figueroa	AES PR.	
Carlos Alequin	AES P.R.	
Marco Anesti	AES	
Melisa Cruz	AES Perf.	
Edna Sánchez	AES	
Henrick Roman	AES	
Wilfredo Diaz	AES PR.	
Elias Sutin	AES	
Francisco González	AES	
Michelle López	AES PR LP	
Rafael Quintero	AES	
Arnaldo Porrata	AES	

AES Puerto Rico

Multi-Sector General Permit
Stormwater Pollution Prevention & Dust Control Plan Training

Training Attendance Sheet

Date: October 23, 2018.

Time: 10:00 am

Location: AES Puerto Rico, L.P.

Trainers: Carlos Gonzalez / Pedro E. Labayen
CCP Leader / SW Compliance Coord.

No.	Employee Name	Employee Signature	Work Area
1	Maria E. Cruz Reyes		CCP
2	Edwin Torres Cosme		CCP
3	Angel M Torres		CCP
4	Victor H Campos		CCP
5	Juan C. Alvarado		C.C.P.
6	Carlos Gonzalez		CCP TL
7	Pedro E. LaLayen		EHS
8			
9			
10			
11			
12			
13			
14			
15			
16			

ATTACHMENT NO. 4

Revised Facility Routine Inspection Form including signature of the Plant Manager or Designee

Storm Water Industrial Routine Facility Inspection Form — Worksheet No. 5

General Information			
Facility Name	AES Puerto Rico, LP		
NPDES Tracking No.			
Date of Inspection		**Start/End Time**	
Inspector's Name(s) and Signature			
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications			

Weather Information

Weather at time of this inspection?
❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ High Winds
❑ Other: Temperature:

Have any previously unidentified discharges of pollutants occurred since the last inspection? ❑Yes ❑No
If yes, describe:

Are there any discharges occurring at the time of inspection? ❑Yes ❑No
If yes, describe:

Control Measures

- *Number the structural stormwater control measures identified in your SWPPP on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
Run-on Control (Northeast Area)				
01	Earth berm	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
02	Concrete wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
03	Rip rap	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
04	Concrete swale	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
05	Run-on inlet grate	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
06	Polymer secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
Firewater Pump station Area				
07	Diesel tank secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
08	Oil / Water Separator	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
East Access Road Area				
09	Concrete channel	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
10	Low wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
11	Concrete swale next to switch yard	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Liquid Urea Storage Area				
12	Low wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
13	Slope liner	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
14	Truck secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
15	Tank secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
16	Concrete berm	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
17	Concrete channel culvert inlet	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Oil Drums Storage				
18	Covered secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Ash Silos- spout				
19	Ash silos	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
20	Spout connection	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
21	Water spray nozzles	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
22	Water hose	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
		Diesel Fuel Storage		
23	Tank truck secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
24	Tanks secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
25	Drip pans for vehicle / equipment fueling	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
		Agremax Stockpile		
26	Gabion wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
27	10 feet buffer zone	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
28	Low wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
32	Covered conveyors	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
35	Wheel wash	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
37	Concrete channel	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
		Gate #3		
39	Road grating (2) and Speed bump	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
40	Curb	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
41	Curb riprap	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
42	Slope liner	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
43	Outfall riprap	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
44	Sampling Point Outfall 002	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
45	Concrete wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Agremax Stockpile Perimeter Road				
48	Gravel cover	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
49	Concrete channel	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
50	Low wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
51	Run on outfall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Coal Stockpile				
52	Runoff pond	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
53	Super silt fence	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
54	Sediment trap	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
55	Concrete swale	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
56	Wheel washer	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
57	Riprap in channel and slopes	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Heavy Equipment Maintenance Shop				
61	Floor grating	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
62	Oil / Water Separator	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
63	Used oil storage tank and drums secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
64	Recyclable metals roll-off container cover	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
Warehouse / Urea Storage Building				
65	Access road gravel cover	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
66	Earthen berm on west side	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
67	Low wall on north side	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
68	Trapezoidal swale	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Open Area West of Cooling Tower				
69	Gravel cover	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
70	Slope liners	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Cooling Tower				
71	Secondary containment dike	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Water Treatment				
72	Sludge roll- off container inside clean grating	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
73	Soda ash silo secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
74	Acid / caustic tank truck unloading secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Access Road West of Power Plant				
75	Catch basin inserts	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
76	Curb inlet	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
77	Concrete berm w/ shallow gutter and curb inlet	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
78	Mercury control chemicals covered storage dike	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Storm Water Runoff Pond				
80	Concrete weir	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
81	Riprap channel	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
82	Sediment accumulation control	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
83	Chemicals secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Road North of Coal Pile Runoff Pond				
85	Coal pile runoff pond	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
86	Low wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
87	Riprap in channel and slopes	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
88	Concrete wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
89	Concrete beam	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
90	Box culvert	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
91	Sampling Point Outfall 003	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Marine Dock				
92	Collection manifold	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
93	Pier secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
94	Sampling Point Outfall 001	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
95	Conveyor TCI	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

Areas of Industrial Materials or Activities exposed to stormwater

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed or Completed and Notes
1	Material loading/unloading and storage areas (Agremax, limestone, coal storage)	❑Yes ❑No ❑ N/A	
2	Heavy equipment operations and maintenance areas	❑Yes ❑No ❑ N/A	
3	Fueling areas (heavy equipment fueling and storage tank unloading)	❑Yes ❑No ❑ N/A	
4	Outdoor vehicle and equipment washing areas	❑Yes ❑No ❑ N/A	
5	Waste handling and disposal areas	❑Yes ❑No ❑ N/A	
6	Erodible stockpiles (coal, Agremax)	❑Yes ❑No ❑ N/A	
7	Non-stormwater/ illicit connections	❑Yes ❑No ❑ N/A	
8	Dust generation and vehicle tracking	❑Yes ❑No ❑ N/A	
9	Water Treatment Area	❑Yes ❑No ❑ N/A	
10	Power Block Area	❑Yes ❑No ❑ N/A	
11	Administration Building Area	❑Yes ❑No ❑ N/A	
12	2 Million- gallon and 18 Million-gallon Pond Area	❑Yes ❑No ❑ N/A	
13	Marine Dock Area	❑Yes ❑No ❑ N/A	
14	Stormwater Sample Point 001	❑Yes ❑No ❑ N/A	
15	Stormwater Sample Point 002	❑Yes ❑No ❑ N/A	
16	Stormwater Sample Point 003	❑Yes ❑No ❑ N/A	

	Area/Activity	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed or Completed and Notes
17	Run-on storm water conveyance system	❑Yes ❑No ❑ N/A	
18	Run-off storm water conveyance system	❑Yes ❑No ❑ N/A	
19	Process water conveyance system	❑Yes ❑No ❑ N/A	
20	CDS/ESP Area	❑Yes ❑No ❑ N/A	
21	Polymer application at 2 MM-gallon pond area	❑Yes ❑No ❑ N/A	
22	18 MM-gallon Pond Transfer Pumps	❑Yes ❑No ❑ N/A	
23	Coal Crusher Building	❑Yes ❑No ❑ N/A	
24	Portable Toilets	❑Yes ❑No ❑ N/A	

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Plant Manager or Designee Name: _____

Signature: _____ **Date:** _____

ATTACHMENT NO. 5

Revised Facility Routine Inspection Form to show specific number keyed to each BMP

Storm Water Industrial Routine Facility Inspection Form — Worksheet No. 5

General Information			
Facility Name	AES Puerto Rico, LP		
NPDES Tracking No.			
Date of Inspection		**Start/End Time**	
Inspector's Name(s) and Signature			
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications			

Weather Information

Weather at time of this inspection?
❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ High Winds
❑ Other: Temperature:

Have any previously unidentified discharges of pollutants occurred since the last inspection? ❑Yes ❑No
If yes, describe:

Are there any discharges occurring at the time of inspection? ❑Yes ❑No
If yes, describe:

Control Measures

- *Number the structural stormwater control measures identified in your SWPPP on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
Run-on Control (Northeast Area)				
01	Earth berm	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
02	Concrete wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
03	Rip rap	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
04	Concrete swale	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
05	Run-on inlet grate	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
06	Polymer secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
		Firewater Pump station Area		
07	Diesel tank secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
08	Oil / Water Separator	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
		East Access Road Area		
09	Concrete channel	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
10	Low wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
11	Concrete swale next to switch yard	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
		Liquid Urea Storage Area		
12	Low wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
13	Slope liner	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
14	Truck secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
15	Tank secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
16	Concrete berm	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
17	Concrete channel culvert inlet	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
		Oil Drums Storage		
18	Covered secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
		Ash Silos- spout		
19	Ash silos	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
20	Spout connection	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
21	Water spray nozzles	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
22	Water hose	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
		Diesel Fuel Storage		
23	Tank truck secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
24	Tanks secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
25	Drip pans for vehicle / equipment fueling	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
		Agremax Stockpile		
26	Gabion wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
27	10 feet buffer zone	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
28	Low wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
32	Covered conveyors	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
35	Wheel wash	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
37	Concrete channel	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
		Gate #3		
39	Road grating (2) and Speed bump	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
40	Curb	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
41	Curb riprap	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
42	Slope liner	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
43	Outfall riprap	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
44	Sampling Point Outfall 002	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
45	Concrete wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Agremax Stockpile Perimeter Road				
48	Gravel cover	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
49	Concrete channel	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
50	Low wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
51	Run on outfall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Coal Stockpile				
52	Runoff pond	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
53	Super silt fence	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
54	Sediment trap	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
55	Concrete swale	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
56	Wheel washer	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
57	Riprap in channel and slopes	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Heavy Equipment Maintenance Shop				
61	Floor grating	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
62	Oil / Water Separator	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
63	Used oil storage tank and drums secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
64	Recyclable metals roll-off container cover	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
Warehouse / Urea Storage Building				
65	Access road gravel cover	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
66	Earthen berm on west side	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
67	Low wall on north side	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
68	Trapezoidal swale	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Open Area West of Cooling Tower				
69	Gravel cover	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
70	Slope liners	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Cooling Tower				
71	Secondary containment dike	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Water Treatment				
72	Sludge roll- off container inside clean grating	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
73	Soda ash silo secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
74	Acid / caustic tank truck unloading secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Access Road West of Power Plant				
75	Catch basin inserts	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
76	Curb inlet	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
77	Concrete berm w/ shallow gutter and curb inlet	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
78	Mercury control chemicals covered storage dike	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Storm Water Runoff Pond				
80	Concrete weir	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
81	Riprap channel	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
82	Sediment accumulation control	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
83	Chemicals secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Road North of Coal Pile Runoff Pond				
85	Coal pile runoff pond	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
86	Low wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
87	Riprap in channel and slopes	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
88	Concrete wall	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
89	Concrete beam	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
90	Box culvert	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
91	Sampling Point Outfall 003	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
Marine Dock				
92	Collection manifold	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
93	Pier secondary containment	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
94	Sampling Point Outfall 001	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
95	Conveyor TCI	❑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

Areas of Industrial Materials or Activities exposed to stormwater

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed or Completed and Notes
1	Material loading/unloading and storage areas (Agremax, limestone, coal storage)	❑Yes ❑No ❑ N/A	
2	Heavy equipment operations and maintenance areas	❑Yes ❑No ❑ N/A	
3	Fueling areas (heavy equipment fueling and storage tank unloading)	❑Yes ❑No ❑ N/A	
4	Outdoor vehicle and equipment washing areas	❑Yes ❑No ❑ N/A	
5	Waste handling and disposal areas	❑Yes ❑No ❑ N/A	
6	Erodible stockpiles (coal, Agremax)	❑Yes ❑No ❑ N/A	
7	Non-stormwater/ illicit connections	❑Yes ❑No ❑ N/A	
8	Dust generation and vehicle tracking	❑Yes ❑No ❑ N/A	
9	Water Treatment Area	❑Yes ❑No ❑ N/A	
10	Power Block Area	❑Yes ❑No ❑ N/A	
11	Administration Building Area	❑Yes ❑No ❑ N/A	
12	2 Million- gallon and 18 Million-gallon Pond Area	❑Yes ❑No ❑ N/A	
13	Marine Dock Area	❑Yes ❑No ❑ N/A	
14	Stormwater Sample Point 001	❑Yes ❑No ❑ N/A	
15	Stormwater Sample Point 002	❑Yes ❑No ❑ N/A	
16	Stormwater Sample Point 003	❑Yes ❑No ❑ N/A	

	Area/Activity	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed or Completed and Notes
17	Run-on storm water conveyance system	❑Yes ❑No ❑ N/A	
18	Run-off storm water conveyance system	❑Yes ❑No ❑ N/A	
19	Process water conveyance system	❑Yes ❑No ❑ N/A	
20	CDS/ESP Area	❑Yes ❑No ❑ N/A	
21	Polymer application at 2 MM-gallon pond area	❑Yes ❑No ❑ N/A	
22	18 MM-gallon Pond Transfer Pumps	❑Yes ❑No ❑ N/A	
23	Coal Crusher Building	❑Yes ❑No ❑ N/A	
24	Portable Toilets	❑Yes ❑No ❑ N/A	

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

CERTIFICATION STATEMENT

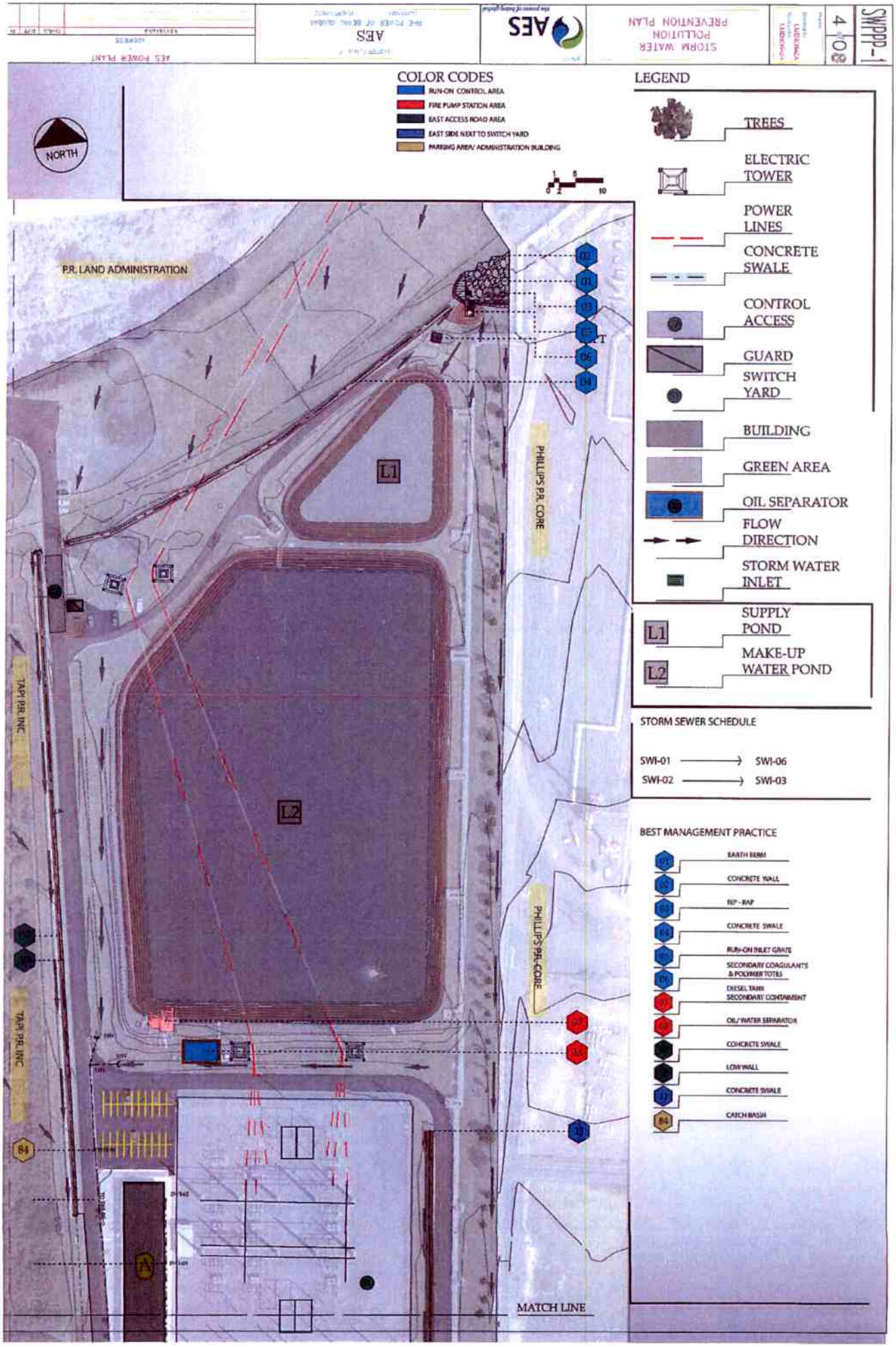
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Plant Manager or Designee Name: _____

Signature: _____ **Date:** _____

ATTACHMENT NO. 6

Facility Site Map depicting location of the BMPs


SWPPP-1
4 OF 8
STORM WATER POLLUTION PREVENTION PLAN
AES
COLOR CODES
RUN-ON CONTROL AREA
FIRE PUMP STATION AREA
EAST ACCESS ROAD AREA
EAST SIDE NEXT TO SWITCH YARD
PARKING AREA/ ADMINISTRATION BUILDING
NORTH
LEGEND
TREES
ELECTRIC TOWER
POWER LINES
CONCRETE SWALE
CONTROL ACCESS
GUARD
SWITCH YARD
BUILDING
GREEN AREA
OIL SEPARATOR
FLOW DIRECTION
STORM WATER INLET
L1 SUPPLY POND
L2 MAKE-UP WATER POND
P.R. LAND ADMINISTRATION
PHILLIPS P.R. CORE
TAPI P.R. INC.
MATCH LINE
STORM SEWER SCHEDULE
SWI-01 → SWI-06
SWI-02 → SWI-03
BEST MANAGEMENT PRACTICE
EARTH BERM
CONCRETE WALL
RIP - RAP
CONCRETE SWALE
RUN-ON INLET GRATE
SECONDARY COAGULANTS & POLYMER TOTES
DIESEL TANK SECONDARY CONTAINMENT
OIL/ WATER SEPARATOR
CONCRETE SWALE
LOW WALL
CONCRETE SWALE
CATCH BASIN

AES POWER PLANT

AES

STORM WATER POLLUTION PREVENTION PLAN

SWPPP-1

COAL STOCKPILE AREA | HEAVY EQUIPMENT SHOP | STORMWATER RUNOFF POND | WEST SIDE 100 YEAR CHANNEL

NORTH

0 2 5 10

LEGEND

- CONCRETE SWALE
- BUILDING
- GREEN AREA
- FLOW DIRECTION
- STORM WATER INLET
- STORM WATER MANHOLE

BEST MAGEMENT PRACTICE

TAPI P.R. INC

TAPI P.R. INC

100 YEAR CHANNEL

100 YEAR CHANNEL

100 YEAR CHANNEL

100 YEAR CHANNEL

AES ILUMINA

DIRT ROAD

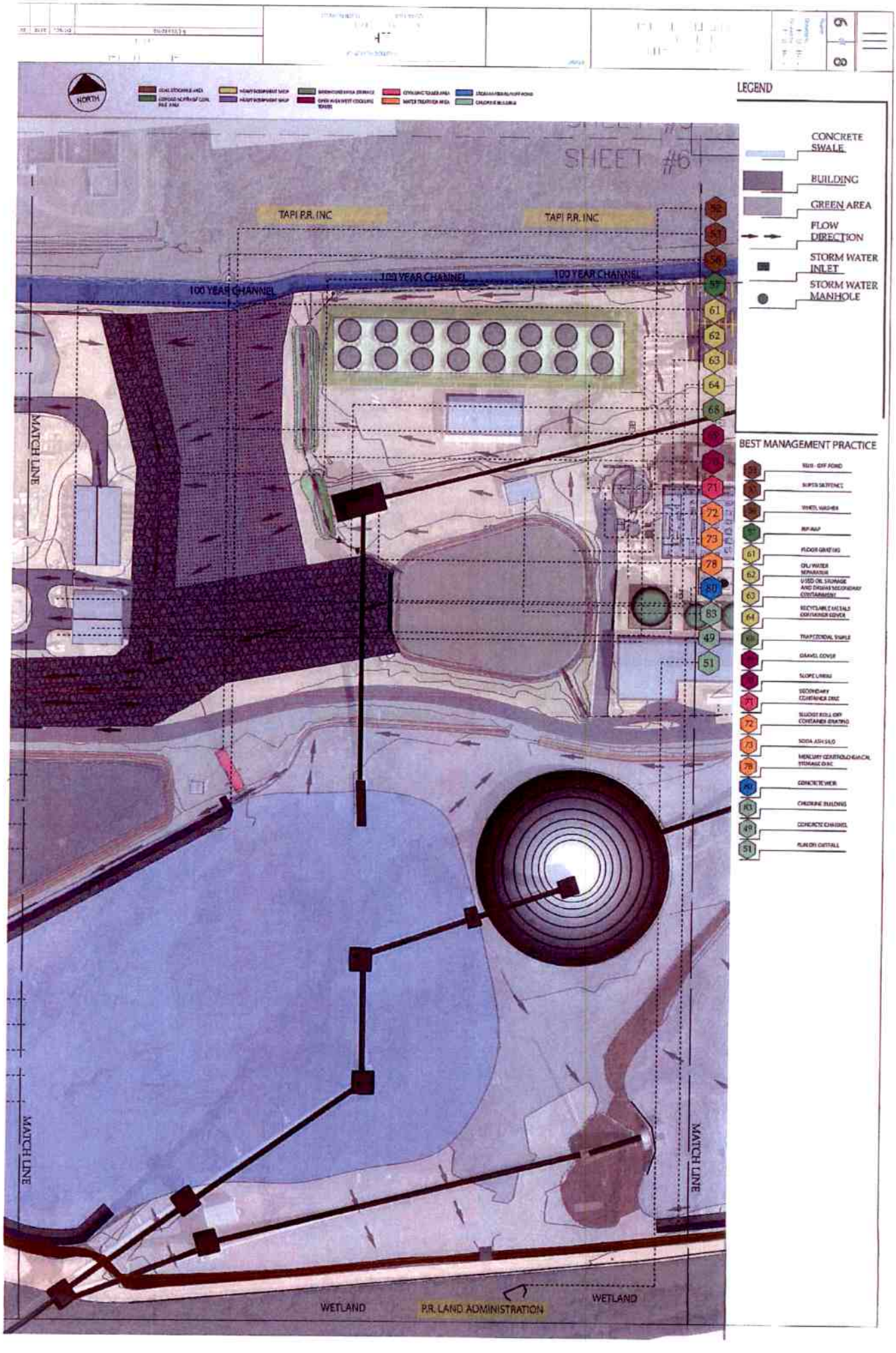
DIRT ROAD

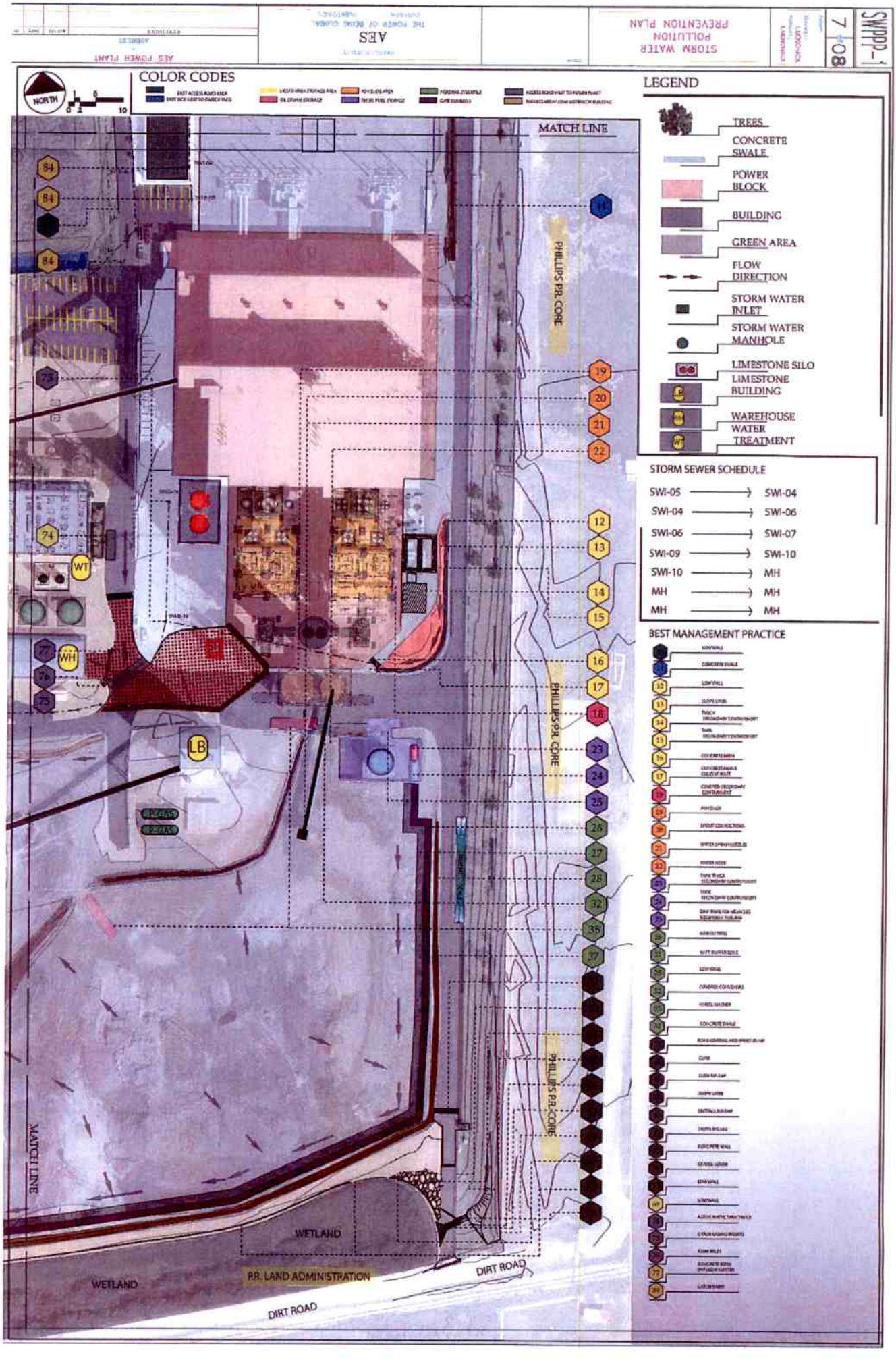
MATCH LINE

MATCH LINE

WETLAND

WETLAND


NORTH
SHEET #6
TAPI P.R. INC
TAPI P.R. INC
100 YEAR CHANNEL
100 YEAR CHANNEL
100 YEAR CHANNEL
MATCH LINE
MATCH LINE
MATCH LINE
WETLAND
P.R. LAND ADMINISTRATION
WETLAND
LEGEND
CONCRETE SWALE
BUILDING
GREEN AREA
FLOW DIRECTION
STORM WATER INLET
STORM WATER MANHOLE
BEST MANAGEMENT PRACTICE
FLOOR GRATING
OIL/WATER SEPARATOR
RECYCLABLE METALS CONTAINER COVER
GRAVEL COVER
SLOPE LINING
SECONDARY CONTAINER DIKE
SODA ASH SILO
CONCRETE WEIR
CHLORINE BUILDING
RUN OFF OUTFALL


AES
STORM WATER POLLUTION PREVENTION PLAN
SWPPP-1
7 of 08
COLOR CODES
NORTH
LEGEND
TREES
CONCRETE SWALE
POWER BLOCK
BUILDING
GREEN AREA
FLOW DIRECTION
STORM WATER INLET
STORM WATER MANHOLE
LIMESTONE SILO
LIMESTONE BUILDING
WAREHOUSE
WATER TREATMENT
STORM SEWER SCHEDULE
SWI-05 → SWI-04
SWI-04 → SWI-06
SWI-06 → SWI-07
SWI-09 → SWI-10
SWI-10 → MH
MH → MH
MH → MH
BEST MANAGEMENT PRACTICE
MATCH LINE
PHILLIPS PR. CORE
WETLAND
PR. LAND ADMINISTRATION
DIRT ROAD
LB
WT
WH

AES POWER PLANT

AES
THE POWER OF BEING GLOBAL

STORM WATER POLLUTION PREVENTION PLAN

8 of 08

SWPPP-1

COLOR CODES

MARINE DOCK

NORTH

0 2 5 10

BEST MANAGEMENT PRACTICE

94 SAMPLING 001

92 COLLECTION MANIFOLD

93 PIER SECUNDARY CONTAINER

95 CONVEYOR TC1

94

92

93

95

WETLAND

PR. LAND ADMINISTRATION

LAS MAREAS HARBOR

LAS MAREAS HARBOR

LAS MAREAS HARBOR

LAS MAREAS HARBOR

PR. LAND ADMINISTRATION

PR. LAND ADMINISTRATION

AES POWER PLANT	AES THE POWER OF GLOBAL GLOBAL		STORM WATER POLLUTION PREVENTION PLAN	8 of 08	SWPPP-1

COLOR CODES

MARINE DOCK

NORTH

0 2 5 10

BEST MANAGEMENT PRACTICE

94 SAMPLING 001

92 COLLECTION MANIFOLD

93 PIER SECUNDARY CONTAINER

95 CONVEYOR TO

ATTACHMENT NO. 7

April 12, 2017 Corrective Action Documentation

AES Puerto Rico

Corrective Action Documentation – 1st Quarter 2017

Instructions:

Within 24 hours of becoming aware of a condition identified in Parts 4.1 or 4.2 of the 2015 MSGP, document the existence of the condition and subsequent actions. Note that this information must be summarized in the annual report (as required in Part 7.5 of the 2015 MSGP).

Corrective Action #1

Description of Condition: Benchmark monitoring was performed during a rain event from outfall 002 on March 23, 2017. Monitoring results received on April 12, 2017, indicated that additional controls should be provided at that drainage area. A partially exposed soil from an unpaved road located south of the Facility was identified. In addition, the existing slope at the heavy trucks entrance road generates a concentrated flow of storm water that is intercepted in only one of the fourteen filter bags already installed.

Date: April 12, 2017

Immediate Actions: An inspection report was generated in order to inform about the situation and keep record. A corrective action plan that includes diversion of storm water from the unpaved and heavy truck entrance road was completed. Also, drain guards were replaced and included as a plant stock item in order to maintain a quarterly replacement frequency of this material.

Actions Taken within 14 Days:

14 Day Infeasibility:

45 Day Extension:

Date Completed: April 22, 2017

Photo #1: Housekeeping activities and storm water inlet filters installation at discharge point #002.

Photo #2: Speed bump installation used for storm water diversion.

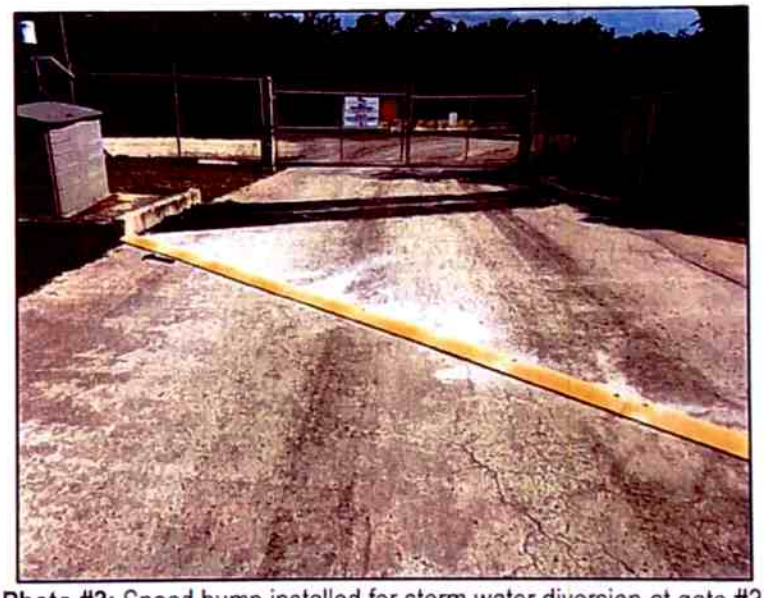


Photo #3: Speed bump installed for storm water diversion at gate #3.

ATTACHMENT NO. 8

Replacement of west section of the silt fence
(June 30, 2018)

AES Puerto Rico

Corrective Action #2

Description of Condition: Silt fence installed at the coal pile storage area was affected by hurricane Maria.

Date: November 15, 2017.

Immediate Actions: Coal pile was regraded and slope terraces were established for erosion control. A buffer zone between the pile storage area and the stormwater channel have been maintained.

Actions Taken within 14 Days:

14 Day Infeasibility: Hurricanes Irma and Maria.

45 Day Extension:

Date Completed: June 30, 2018

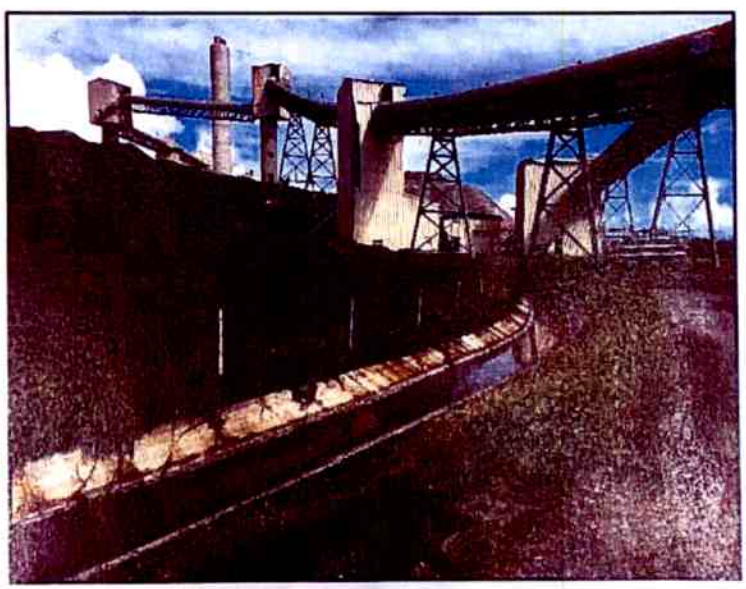


Photo #1: South side of the coal pile storage area.

P.L.G

Photo #2: Silt fence installed at ~~south~~ side of the coal pile storage area.
Southwest

Photo #3: Silt fence installed at ~~south~~ side of the coal pile storage area.
west
P.L.G.

ATTACHMENT NO. 9

AES-PR's Quarterly Visual Assessment Documentation for 2017 Fourth Quarter

MSGP Quarterly Visual Assessment Form

Worksheet No. 6

(Complete a separate form for each outfall you assess)

Name of Facility: **AES Puerto Rico, L.P.** NPDES Tracking No. PRR053093

Outfall Name: **001** "Substantially Identical Outfall"? ☒ No ☐ Yes

Person(s)/Title(s) collecting sample: **Pedro E. Labayen**

Person(s)/Title(s) examining sample: **Pedro E. Labayen / Storm Water Compliance Coordinator**

Date & Time Discharge Began: **(11/13/17 8:00 am)** Date & Time Sample Collected: **(11/13/17 8:15 am)** Date & Time Sample Examined: **(11/13/17 8:15 am)**

Substitute Sample? ☒ No ☐ Yes (identify quarter/year when sample was originally scheduled to be collected):

Nature of Discharge: ☒ Rainfall ☐ Snowmelt

If rainfall: Rainfall Amount: ↓ inches (Antecedent Period) Previous Storm Ended > 72 hours Before Start of This Storm? ☒ Yes ☐ No*

Parameter

Color ☒ None ☐ Other (describe):

Odor ☒ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas _____ ☐ Solvents ☐ Other (describe):

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other

Floating Solids ☒ No ☐ Yes (describe):

Settled Solids** ☒ No ☐ Yes (describe):

Suspended Solids ☒ No ☐ Yes (describe):

Foam (gently shake sample) ☒ No ☐ Yes (describe):

Oil Sheen ☒ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick ☐ Other (describe):

Other Obvious Indicators of Stormwater Pollution ☒ No ☐ Yes (describe):

Sampling not performed due to no measurable storm event occurring that resulted in a discharge during the monitoring quarter:

☒ No ☐ Yes (describe):

* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

** Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions taken below (attach additional sheets as necessary).

Certification by Facility Responsible Official (Refer to MSGP Subpart 11 Appendix B for Signatory Requirements)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name: Pedro E. Labayen

B. Title: Storm Water Compliance Coordinator

C. Signature: Pedro E. Labayen

D. Date Signed: November 13, 2017.

MSGP Quarterly Visual Assessment Form

Worksheet No. 6

(Complete a separate form for each outfall you assess)

Name of Facility: **AES Puerto Rico, L.P.** NPDES Tracking No: **PRR053093**

Outfall Name: **002** "Substantially Identical Outfall"? ☒ No ☐ Yes

Person(s)/Title(s) collecting sample: **Pedro E. Labayen**

Person(s)/Title(s) examining sample: **Pedro E. Labayen / Storm Water Compliance Coordinator**

Date & Time Discharge Began: **11/13/17 (8:30 am)** Date & Time Sample Collected: **11/13/17 (8:35 pm)** Date & Time Sample Examined: **11/13/17 (8:35 pm)**

Substitute Sample? ☒ No ☐ Yes (identify quarter/year when sample was originally scheduled to be collected):

Nature of Discharge: ☒ Rainfall ☐ Snowmelt

If rainfall: Rainfall Amount: **inch** by Hurricane Irma Previous Storm Ended > 72 hours Before Start of This Storm? ☒ Yes ☐ No*

Parameter

Color ☒ None ☐ Other (describe):

Odor ☒ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas _____
☐ Solvents ☐ Other (describe):

Clarity ☐ Clear ☒ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other

Floating Solids ☒ No ☐ Yes (describe):

Settled Solids** ☒ No ☐ Yes

Suspended Solids ☒ No ☐ Yes (describe):

Foam (gently shake sample) ☒ No ☐ Yes (describe):

Oil Sheen ☒ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick
☐ Other (describe):

Other Obvious Indicators of Stormwater Pollution ☒ No ☐ Yes (describe):

Sampling not performed due to no measurable storm event occurring that resulted in a discharge during the monitoring quarter:

☒ No ☐ Yes (describe):

* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

** Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions taken below (attach additional sheets as necessary). *The SWPP Team is evaluating the potential reuse of all or part of the storm water received in outfall 002.*

Certification by Facility Responsible Official (Refer to MSGP Subpart 11 Appendix B for Signatory Requirements)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name: Pedro E. Labayen

B. Title: Storm Water Compliance Coordinator

C. Signature: Pedro E. Labayen

D. Date Signed: November 13, 2017.

MSGP Quarterly Visual Assessment Form

Worksheet No. 6

(Complete a separate form for each outfall you assess)

Name of Facility: **AES Puerto Rico, L.P.** NPDES Tracking No. **PRR053093**

Outfall Name: **003** "Substantially Identical Outfall"? ☒ No ☐ Yes

Person(s)/Title(s) collecting sample: **Pedro E. Labayen**

Person(s)/Title(s) examining sample: **Pedro E. Labayen / Storm Water Compliance Coordinator**

Date & Time Discharge Began: **11/13/17 (8:30 am)** Date & Time Sample Collected: **11/13/17 (8:50 am)** Date & Time Sample Examined: **11/13/17 (8:50 am)**

Substitute Sample? ☒ No ☐ Yes (identify quarter/year when sample was originally scheduled to be collected):

Nature of Discharge: ☒ Rainfall ☐ Snowmelt

If rainfall: Rainfall Amount: inch (Hurricane Period) Previous Storm Ended > 72 hours Before Start of This Storm? ☒ Yes ☐ No*

Parameter

Color ☒ None ☐ Other (describe):

Odor ☒ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas _____
☐ Solvents ☐ Other (describe):

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other

Floating Solids ☒ No ☐ Yes (describe):

Settled Solids** ☒ No ☐ Yes

Suspended Solids ☒ No ☐ Yes (describe):

Foam (gently shake sample) ☒ No ☐ Yes (describe):

Oil Sheen ☒ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick
☐ Other (describe):

Other Obvious Indicators of Stormwater Pollution ☒ No ☐ Yes (describe):

Sampling not performed due to no measurable storm event occurring that resulted in a discharge during the monitoring quarter:

☒ No ☐ Yes (describe):

* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

** Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions taken below (attach additional sheets as necessary).

Certification by Facility Responsible Official (Refer to MSGP Subpart 11 Appendix B for Signatory Requirements)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name: Pedro E. Labayen

B. Title: Storm Water Compliance Coordinator

C. Signature: Pedro E. Labayen

D. Date Signed: November 13, 2017.

Supplement for the October to December 2017 quarterly period

MSGP Quarterly Visual Assessment Form

Worksheet No. 6

(Complete a separate form for each outfall you assess)

Name of Facility: **AES Puerto Rico, L.P.** NPDES Tracking No. **PRR053093**

Outfall Name: **002** "Substantially Identical Outfall"? ☒ No ☐ Yes

Person(s)/Title(s) collecting sample: **Pedro E. Labayen**

Person(s)/Title(s) examining sample: **Pedro E. Labayen / Storm Water Compliance Coordinator**

Date & Time Discharge Began: **11/13/17 (8:30 am)** Date & Time Sample Collected: **11/13/17 (8:35 pm)** Date & Time Sample Examined: **11/13/17 (8:35 pm)**

Substitute Sample? ☒ No ☐ Yes (identify quarter/year when sample was originally scheduled to be collected):

Nature of Discharge: ☒ Rainfall ☐ Snowmelt

If rainfall: Rainfall Amount: **0.14 inch** Previous Storm Ended > 72 hours Before Start of This Storm? ☒ Yes ☐ No*

Parameter

Color ☒ None ☐ Other (describe):

Odor ☒ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas _____
☐ Solvents ☐ Other (describe):

Clarity ☐ Clear ☒ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other

Floating Solids ☒ No ☐ Yes (describe):

Settled Solids** ☒ No ☐ Yes

Suspended Solids ☒ No ☐ Yes (describe):

am (gently shake sample) ☒ No ☐ Yes (describe):

Oil Sheen ☒ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick
☐ Other (describe):

Other Obvious Indicators of Stormwater Pollution ☒ No ☐ Yes (describe):

Sampling not performed due to no measurable storm event occurring that resulted in a discharge during the monitoring quarter:

☒ No ☐ Yes (describe):

* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

** Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions taken below (attach additional sheets as necessary).

Certification by Facility Responsible Official (Refer to MSGP Subpart 11 Appendix B for Signatory Requirements)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name: B. Title:

C. Signature: D. Date Signed:

MSGP Quarterly Visual Assessment Form

Worksheet No. 6

(Complete a separate form for each outfall you assess)

Name of Facility: **AES Puerto Rico, L.P.** NPDES Tracking No. PRR053093

Outfall Name: **001** "Substantially Identical Outfall"? ☒ No ☐ Yes

Person(s)/Title(s) collecting sample: **Pedro E. Labayen**

Person(s)/Title(s) examining sample: **Pedro E. Labayen / Storm Water Compliance Coordinator**

Date & Time Discharge Began: **(11/13/17 8:00 am)** Date & Time Sample Collected: **(11/13/17 8:15 am)** Date & Time Sample Examined: **(11/13/17 8:15 am)**

Substitute Sample? ☒ No ☐ Yes (identify quarter/year when sample was originally scheduled to be collected):

Nature of Discharge: ☒ Rainfall ☐ Snowmelt

If rainfall: Rainfall Amount: **0.14 inches** Previous Storm Ended > 72 hours Before Start of This Storm? ☒ Yes ☐ No*

Parameter

Color ☒ None ☐ Other (describe):

Odor ☒ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas _____
☐ Solvents ☐ Other (describe):

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other

Floating Solids ☒ No ☐ Yes (describe):

Settled Solids** ☒ No ☐ Yes (describe):

Suspended Solids ☒ No ☐ Yes (describe):

)am (gently shake sample) ☒ No ☐ Yes (describe):

Oil Sheen ☒ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick
☐ Other (describe):

Other Obvious Indicators of Stormwater Pollution ☒ No ☐ Yes (describe):

Sampling not performed due to no measurable storm event occurring that resulted in a discharge during the monitoring quarter:

☒ No ☐ Yes (describe):

* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

** Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions taken below (attach additional sheets as necessary).

Certification by Facility Responsible Official (Refer to MSGP Subpart 11 Appendix B for Signatory Requirements)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name: B. Title:

C. Signature: D. Date Signed:

MSGP Quarterly Visual Assessment Form — Worksheet No. 6

(Complete a separate form for each outfall you assess)

Name of Facility: **AES Puerto Rico, L.P.** NPDES Tracking No. **PRR053093**

Outfall Name: **003** "Substantially Identical Outfall"? ☒ No ☐ Yes

Person(s)/Title(s) collecting sample: **Pedro E. Labayen**

Person(s)/Title(s) examining sample: **Pedro E. Labayen / Storm Water Compliance Coordinator**

Date & Time Discharge Began: **11/13/17 (8:30 am)** Date & Time Sample Collected: **11/13/17 (8:50 am)** Date & Time Sample Examined: **11/13/17 (8:50 am)**

Substitute Sample? ☒ No ☐ Yes (identify quarter/year when sample was originally scheduled to be collected):

Nature of Discharge: ☒ Rainfall ☐ Snowmelt

If rainfall: Rainfall Amount: **0.14** **inch** Previous Storm Ended > 72 hours Before Start of This Storm? ☒ Yes ☐ No*

Parameter

Color ☒ None ☐ Other (describe):

Odor ☒ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas _____
☐ Solvents ☐ Other (describe):

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other

Floating Solids ☒ No ☐ Yes (describe):

Settled Solids** ☒ No ☐ Yes

Suspended Solids ☒ No ☐ Yes (describe):

Foam (gently shake sample) ☒ No ☐ Yes (describe):

Oil Sheen ☒ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick
☐ Other (describe):

Other Obvious Indicators of Stormwater Pollution ☒ No ☐ Yes (describe):

Sampling not performed due to no measurable storm event occurring that resulted in a discharge during the monitoring quarter:

☒ No ☐ Yes (describe):

* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

** Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions taken below (attach additional sheets as necessary).

Certification by Facility Responsible Official (Refer to MSGP Subpart 11 Appendix B for Signatory Requirements)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name: B. Title:

C. Signature: D. Date Signed:

ATTACHMENT NO. 10

AES-PR's Quarterly Visual Assessment Documentation for 2018 First Quarter

MSGP Quarterly Visual Assessment Form

Worksheet No. 6

(Complete a separate form for each outfall you assess)

Name of Facility: **AES Puerto Rico, L.P.** NPDES Tracking No. **PRR053093**

Outfall Name: **001** "Substantially Identical Outfall"? ☒ No ☐ Yes

Person(s)/Title(s) collecting sample: **NA**

Person(s)/Title(s) examining sample: **NA**

Date & Time Discharge Began: NA Q-1 Date & Time Sample Collected: NA Q-1 Date & Time Sample Examined: NA Q-1

Substitute Sample? ☒ No ☐ Yes (identify quarter/year when sample was originally scheduled to be collected):

Nature of Discharge: ☒ Rainfall ☐ Snowmelt

If rainfall: Rainfall Amount: **inches** Previous Storm Ended > 72 hours Before Start of This Storm? ☒ Yes ☐ No*

Parameter

Color ☐ None ☐ Other (describe):

Odor ☐ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas _____
☐ Solvents ☐ Other (describe):

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other

Floating Solids ☐ No ☐ Yes (describe):

Settled Solids** ☐ No ☐ Yes (describe):

Suspended Solids ☐ No ☐ Yes (describe):

m (gently shake sample) ☒ No ☐ Yes (describe):

Oil Sheen ☐ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick
☐ Other (describe):

Other Obvious Indicators of Stormwater Pollution ☐ No ☐ Yes (describe):

Sampling not performed due to no measurable storm event occurring that resulted in a discharge during the monitoring quarter:

☐ No ☒ Yes (describe):

* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

** Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions taken below (attach additional sheets as necessary).

-No measurable storm event occurred during the 2018 First Inspection Quarter (Q-1 2018).

Certification by Facility Responsible Official (Refer to MSGP Subpart 11 Appendix B for Signatory Requirements)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name: Pedro Labayen

B. Title: Storm Water Compliance Coordinator

C. Signature: Pedro E. Labayen

D. Date Signed: 3/29/2018

MSGP Quarterly Visual Assessment Form

Worksheet No. 6

(Complete a separate form for each outfall you assess)

Name of Facility: **AES Puerto Rico, L.P.** NPDES Tracking No. **PRR053093**

Outfall Name: **002** "Substantially Identical Outfall"? ☒ No ☐ Yes

Person(s)/Title(s) collecting sample: **NA**

Person(s)/Title(s) examining sample: **NA**

Date & Time Discharge Began: NA Q-1 Date & Time Sample Collected: NA Q-1 Date & Time Sample Examined: NA Q-1

Substitute Sample? ☒ No ☐ Yes (identify quarter/year when sample was originally scheduled to be collected):

Nature of Discharge: ☒ Rainfall ☐ Snowmelt

If rainfall: Rainfall Amount: **inches** Previous Storm Ended > 72 hours Before Start of This Storm? ☒ Yes ☐ No*

Parameter

Color ☐ None ☐ Other (describe):

Odor ☐ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas _____
☐ Solvents ☐ Other (describe):

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other

Floating Solids ☐ No ☐ Yes (describe):

Settled Solids** ☐ No ☐ Yes (describe):

Suspended Solids ☐ No ☐ Yes (describe):

m (gently shake sample) ☒ No ☐ Yes (describe):

Oil Sheen ☐ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick
☐ Other (describe):

Other Obvious Indicators of Stormwater Pollution ☐ No ☐ Yes (describe):

Sampling not performed due to no measurable storm event occurring that resulted in a discharge during the monitoring quarter:

☐ No ☒ Yes (describe):

* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

** Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions taken below (attach additional sheets as necessary).

-No measurable storm event occurred during the 2018 First Inspection Quarter (Q-1 2018).

Certification by Facility Responsible Official (Refer to MSGP Subpart 11 Appendix B for Signatory Requirements)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name: Pedro Labayen

B. Title: Storm Water Compliance Coordinator

C. Signature: Pedro Labayen

D. Date Signed: 3/29/2018

MSGP Quarterly Visual Assessment Form

Worksheet No. 6

(Complete a separate form for each outfall you assess)

Name of Facility: **AES Puerto Rico, L.P.** NPDES Tracking No. **PRR053093**

Outfall Name: **003** "Substantially Identical Outfall"? ☒ No ☐ Yes

Person(s)/Title(s) collecting sample: **NA**

Person(s)/Title(s) examining sample: **NA**

Date & Time Discharge Began: NA Q-1 Date & Time Sample Collected: NA Q-1 Date & Time Sample Examined: NA Q-1

Substitute Sample? ☒ No ☐ Yes (identify quarter/year when sample was originally scheduled to be collected):

Nature of Discharge: ☒ Rainfall ☐ Snowmelt

If rainfall: Rainfall Amount: **inches** Previous Storm Ended > 72 hours Before Start of This Storm? ☒ Yes ☐ No*

Parameter

Color ☐ None ☐ Other (describe):

Odor ☐ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas _____ ☐ Solvents ☐ Other (describe):

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other

Floating Solids ☐ No ☐ Yes (describe):

Settled Solids** ☐ No ☐ Yes (describe):

Suspended Solids ☐ No ☐ Yes (describe):

m (gently shake sample) ☒ No ☐ Yes (describe):

Oil Sheen ☐ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick ☐ Other (describe):

Other Obvious Indicators of Stormwater Pollution ☐ No ☐ Yes (describe):

Sampling not performed due to no measurable storm event occurring that resulted in a discharge during the monitoring quarter:

☐ No ☒ Yes (describe):

* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

** Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions taken below (attach additional sheets as necessary).

-No measurable storm event occurred during the 2018 First Inspection Quarter (Q-1 2018).

Certification by Facility Responsible Official (Refer to MSGP Subpart 11 Appendix B for Signatory Requirements)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name: Pedro Labayen

B. Title: Storm Water Compliance Coordinator

C. Signature: Pedro E. Labayen

D. Date Signed: 3/29/2018

ATTACHMENT NO. 11

Revised Corrective Action Documentation

AES Puerto Rico

Storm Water Corrective Actions Documentation

I. Description of Condition Triggering Corrective Action

Unauthorized release or discharge (spill, leak, etc)

Discharge violating a numeric effluent limit

Controls not stringent enough to meet water quality standards or non- numeric limits of the MSGP Permit

Visual assessment evidences storm water pollution

Facility construction or change in design, operation or maintenance that changed the nature or quantity of pollutants discharged

Average of four quarterly sampling results exceeds an applicable benchmark

II. Description of How Condition Was Identified

Identify who, how (inspection, monitoring, other), time and date, attach documentation.

III. Corrective Actions Taken and Deadlines
Identify who, what and date(s)

Immediate actions

Actions within 14 days of discovery

Actions requiring between 14 and 45 days after discovery (describe infeasibility of completion within 14 days of discovery)

Actions requiring more than 45 days after discovery (requires EPA notification providing rationale for an extension and a completion date)

IV. EPA Notification Requirements for Corrective Actions Requiring More Than 45 days after discovery for completion

Identify who notified and when, attach notification documentation to this form

_____

_____

_____

V. Review / Revision of SWPPP

Describe review and revision of SWPPP performed by conditions triggering corrective actions (who , what and when)

_____

_____

_____

VI. Management Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Plant Manager or Designee Name _____

Signature _____

Date _____

ATTACHMENT NO. 12

August 11, 2017 Routine Facility Inspection Documentation

Storm Water Industrial Routine Facility Inspection Form — Worksheet No. 4

General Information			
Facility Name	AES Puerto Rico, LP		
NPDES Tracking No.	PRR053093		
Date of Inspection	August 11, 2017	**Start/End Time**	9:00 am / 12:00 pm
Inspector's Name(s)	Pedro E. Labayen		
Inspector's Title(s)	Stormwater Compliance Coordinator		
Inspector's Contact Information	(787) 866-8117 ext. 2215		
Inspector's Qualifications	Professional Engineer		

Weather Information

Weather at time of this inspection?
☑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ High Winds
❑ Other:
Temperature: **87°F**

Have any previously unidentified discharges of pollutants occurred since the last inspection? ❑Yes ☑No
If yes, describe:

Are there any discharges occurring at the time of inspection? ❑Yes ☑No
If yes, describe:

Control Measures

- *Number the structural stormwater control measures identified in your SWPPP on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
Run-on Control (Northeast Area)				
01	Earth berm	☑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
02	Concrete wall	☑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
03	Rip rap	☑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
04	Concrete swale	☑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
05	Run-on inlet grate	☑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	
06	Polymer secondary containment	☑Yes ❑No	❑ Maintenance ❑ Repair ❑ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
Firewater Pump station Area				
07	Diesel tank secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
08	Oil / Water Separator	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
East Access Road Area				
09	Concrete channel	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
10	Low wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
11	Concrete swale next to switch yard	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Liquid Urea Storage Area				
12	Low wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
13	Slope liner	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
14	Truck secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
15	Tank secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
16	Concrete berm	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
17	Concrete channel culvert inlet	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Oil Drums Storage				
18	Covered secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	New drums were placed near the secondary containment. A notification was completed to store all drums inside secondary containment.
Ash Silos- spout				
19	Ash silos	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
20	Spout connection	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
21	Water spray nozzles	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
22	Water hose	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
			Diesel Fuel Storage	
23	Tank truck secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
24	Tanks secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	~~Tanks were emptied and~~ cleaned on August 5, 2017. Sediments was removed from tank
25	Drip pans for vehicle / equipment fueling	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
			AGREMAX Stockpile	
26	Gabion wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
27	10 feet buffer zone	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	The 10 feet buffer zone was affected by heavy rains. CCP personnel repair the zone once the area became safe and adequate for the work.
28	Low wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
32	Covered conveyors	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
35	Wheel wash	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	The wheel wash station has been out of service since agremax transportation was suspended.
37	Concrete channel	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	The concrete channel was cleaned on July 23, 2017.
			Gate #3	
39	Road grating (2)	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	The storm water inlet filter bags were replaced and the channel at the discharge point 002 was cleaned.
40	Curb	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
41	Curb riprap	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
42	Slope liner	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
43	Outfall riprap	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
44	Sampling Point Outfall 002	☐Yes ☑No	☑ Maintenance ☐ Repair ☐ Replacement	Tracking of sediment by vehicles from the adjacent public dirty road to the plant entrance have been affecting benchmark compliance at that point. An analysis of corrective actions will be performed by an external contractor in order to mitigate the problem.
45	Concrete wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
	AGREMAX Stockpile Perimeter Road			
48	Gravel cover	☐Yes ☑No	☑Maintenance ☐ Repair ☐ Replacement	
49	Concrete channel	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
50	Low wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
51	Run on outfall	☐Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
	Coal Stockpile			
52	Runoff pond	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
53	Super silt fence	☐Yes ☑No	☐ Maintenance ☐ Repair ☑Replacement	A segment of the silt fence located north of the coal storage pile was replaced. Silt fence installed west side of the coal pile needed replacement. A notification was performed (#542920) and new silt fence was ordered.
54	Sediment trap	☑Yes ☐No	☐Maintenance ☐ Repair ☐ Replacement	The sediment trap was cleaned on July 31, 2017.
55	Concrete swale	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
56	Wheel washer	☑Yes ☐No	☐Maintenance ☐ Repair ☐Replacement	
57	Riprap in channel and slopes	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
	Heavy Equipment Maintenance Shop			
61	Floor grating	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
62	Oil / Water Separator	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
63	Used oil storage tank and drums secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
64	Recyclable metals roll-off container cover	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Warehouse / Urea Storage Building				
65	Access road gravel cover	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
66	Earthen berm on west side	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
67	Low wall on north side	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
68	Trapezoidal swale	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Open Area West of Cooling Tower				
69	Gravel cover	☐Yes ☑No	☐ Maintenance ☑ Repair ☐ Replacement	Gravel cover activities were coordinated with an external contractor (Las Piedras Construction Company)
70	Slope liners	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Cooling Tower				
71	Secondary containment dike	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Water Treatment				
72	Sludge roll- off container inside clean grating	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
73	Soda ash silo secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
74	Acid / caustic tank truck unloading secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Access Road West of Power Plant				
75	Catch basin inserts	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
76	Curb inlet	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
77	Concrete berm w/ shallow gutter and curb inlet	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
78	Mercury control chemicals covered storage dike	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Storm Water Runoff Pond				

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
80	Concrete weir	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
81	Riprap channel	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
82	Sediment accumulation control	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
83	Chemicals secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Road North of Coal Pile Runoff Pond				
85	Coal pile runoff pond	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
86	Low wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
87	Riprap in channel and slopes	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
88	Concrete wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
89	Concrete beam	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
90	Box culvert	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
91	Sampling Point Outfall 003	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Marine Dock				
92	Collection manifold	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
93	Pier secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
94	Sampling Point Outfall 001	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
95	Conveyor TCI	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	

Areas of Industrial Materials or Activities exposed to stormwater
Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed or Completed and Notes
1	Material loading/unloading and storage areas (Agremax, limestone, coal storage)	☑Yes ❑No ❑ N/A	
2	Heavy equipment operations and maintenance areas	☑Yes ❑No ❑ N/A	
3	Fueling areas (heavy equipment fueling and storage tank unloading)	☑Yes ❑No ❑ N/A	
4	Outdoor vehicle and equipment washing areas	☑Yes ❑No ❑ N/A	
5	Waste handling and disposal areas	☑Yes ❑No ❑ N/A	
6	Erodible stockpiles (coal, Agremax)	☑Yes ❑No ❑ N/A	
7	Non-stormwater/ illicit connections	❑Yes ❑No ☑ N/A	
8	Dust generation and vehicle tracking	☑Yes ❑No ❑ N/A	
9	Water Treatment Area	☑Yes ❑No ❑ N/A	
10	Power Block Area	☑Yes ❑No ❑ N/A	
11	Administration Building Area	☑Yes ❑No ❑ N/A	
12	2 Million- gallon and 18 Million-gallon Pond Area	☑Yes ❑No ❑ N/A	
13	Marine Dock Area	☑Yes ❑No ❑ N/A	
14	Stormwater Sample Point 001	☑Yes ❑No ❑ N/A	
15	Stormwater Sample Point 002	❑Yes ☑No ❑ N/A	Explained above.
16	Stormwater Sample Point 003	☑Yes ❑No ❑ N/A	

	Area/Activity	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed or Completed and Notes
17	Run-on storm water conveyance system	☑Yes ❑No ❑ N/A	
18	Run-off storm water conveyance system	☑Yes ❑No ❑ N/A	
19	Process water conveyance system	☑Yes ❑No ❑ N/A	
20	CDS/ESP Area	☑Yes ❑No ❑ N/A	
21	Polymer application at 2 MM-gallon pond area	☑Yes ❑No ❑ N/A	
22	18 MM-gallon Pond Transfer Pumps	☑Yes ❑No ❑ N/A	
23	Coal Crusher Building	☑Yes ❑No ❑ N/A	
24	Portable Toilets	☑Yes ❑No ❑ N/A	

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

An EPA MSGP compliance inspection was performed on July 21, 2017. Findings of noncompliance with the 2015 NPDES MSGP were observed by EPA. These includes:

1. Benchmark exceedance in outfall 002.
2. Filter bags deteriorated.
3. Stormwater pond not properly maintained.
4. Stormwater conveyance ditch covered with AGREMAX.
5. Diesel control tank with water accumulation.
6. AGREMAX pile water sprinklers not in use.
7. Sweeper not observed in use.
8. Exposed soil.
9. Gabion barrier filter fabric disrepair and AGREMAX accumulation.
10. Slope eroded.

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

A corrective action evaluation will be performed by an external contractor in order to reduce or eliminate the discharge of vehicle tracked solids through outfall 002 and get the plant into compliance with benchmark parameter.

Notes

Use this space for any additional notes or observations from the inspection:

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title: Pedro E. Lebrón / Storm Water Compliance Coordinator

Signature: [signature] **Date:** August 14, 2017

ATTACHMENT NO. 13

July 21, 2017 Corrective Action Documentation

Corrective Action #4

Description of Condition: A segment of the storm water concrete channel located around the coal pile storage area needed improvements.

Date: July 31, 2017.

Immediate Actions: An inspection report was generated to inform about the situation and for record.

Actions Taken within 14 Days: An external contractor visited the facility, evaluate the channel condition and proceed with the reparation.

14 Day Infeasibility:

45 Day Extension:

Date Completed: August 21, 2017.

Photo #1: Concrete channel that needed reparation.

Photo #2: Concrete channel repaired.

ATTACHMENT NO. 14

Soil stabilization

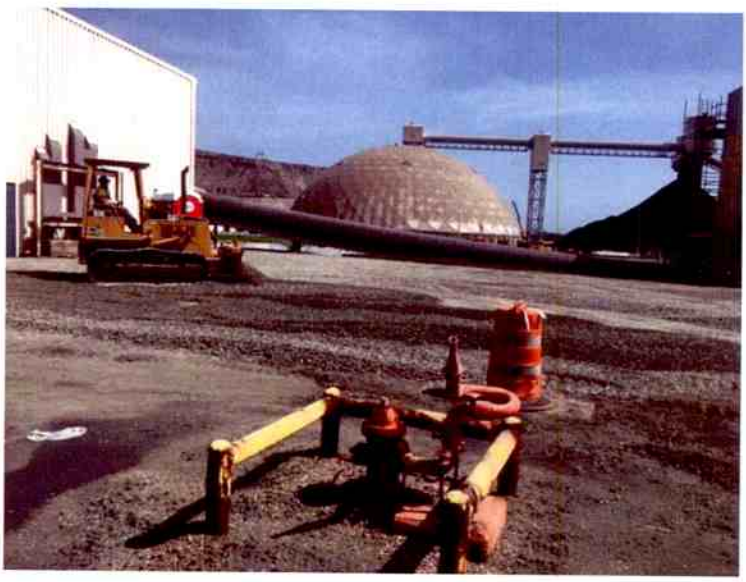


Photo: Gravel installed at the Cooling Towers area.

Date taken: August 31, 2017 2:59 pm

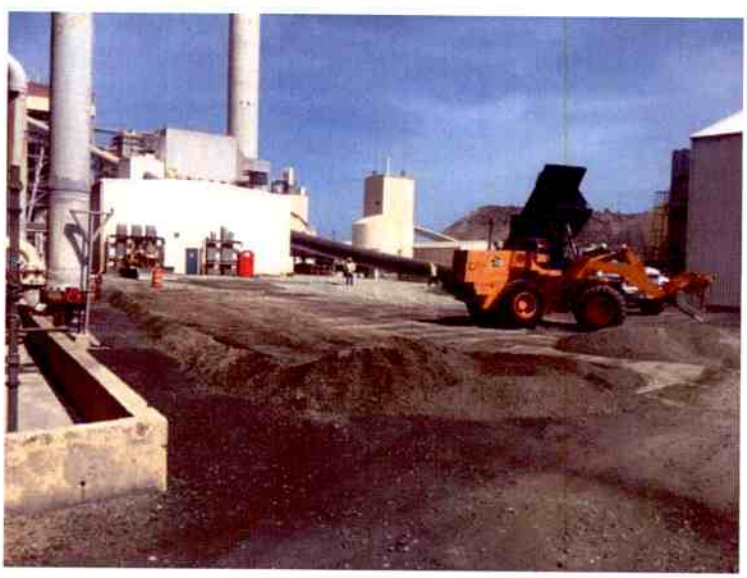


Photo: Gravel installed at the Cooling Towers area.

Date taken: August 31, 2017 3:00 pm

Photo: Gravel installed at the Cooling Towers area.

Date taken: August 31, 2017 2:58 pm

ATTACHMENT NO. 15

Routine Facility Inspection conducted
on March 23, 2017

Storm Water Industrial Routine Facility Inspection Form — Worksheet No. 4

General Information			
Facility Name	AES Puerto Rico, LP		
NPDES Tracking No.	PRR053093		
Date of Inspection	March 23, 2017	**Start/End Time**	1:00 pm / 2:00 pm
Inspector's Name(s)	Pedro E. Labayen		
Inspector's Title(s)	Stormwater Compliance Coordinator		
Inspector's Contact Information	(787) 866-8117 ext. 2215		
Inspector's Qualifications	Professional Engineer		

Weather Information

Weather at time of this inspection?
☑ Clear ☐ Cloudy ☑ Rain ☐ Sleet ☐ Fog ☐ High Winds
☐ Other:
Temperature: **80°F**

Have any previously unidentified discharges of pollutants occurred since the last inspection? ☐ Yes ☑ No
If yes, describe:

Are there any discharges occurring at the time of inspection? ☑ Yes ☑ No
If yes, describe:
outfall 002 Sample was taken

Control Measures

- *Number the structural stormwater control measures identified in your SWPPP on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
Run-on Control (Northeast Area)				
01	Earth berm	☑ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
02	Concrete wall	☑ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
03	Rip rap	☑ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
04	Concrete swale	☑ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
05	Run-on inlet grate	☑ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	
06	Polymer secondary containment	☑ Yes ☐ No	☐ Maintenance ☐ Repair ☐ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
Firewater Pump station Area				
07	Diesel tank secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
08	Oil / Water Separator	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
East Access Road Area				
09	Concrete channel	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
10	Low wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
11	Concrete swale next to switch yard	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Liquid Urea Storage Area				
12	Low wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
13	Slope liner	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
14	Truck secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
15	Tank secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
16	Concrete berm	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
17	Concrete channel culvert inlet	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Oil Drums Storage				
18	Covered secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Ash Silos- spout				
19	Ash silos	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
20	Spout connection	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
21	Water spray nozzles	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
22	Water hose	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
	Diesel Fuel Storage			
23	Tank truck secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
24	Tanks secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
25	Drip pans for vehicle / equipment fueling	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
	AGREMAX Stockpile			
26	Gabion wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
27	10 feet buffer zone	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
28	Low wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
32	Covered conveyors	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
35	Wheel wash	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
37	Concrete channel	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
	Gate #3			
39	Road grating (2)	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
40	Curb	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
41	Curb riprap	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
42	Slope liner	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
43	Outfall riprap	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
44	Sampling Point Outfall 002	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
45	Concrete wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
AGREMAX Stockpile Perimeter Road				
48	Gravel cover	☐Yes ☑No	☑ Maintenance ☐ Repair ☐ Replacement	Gravel cover has not been effective in controlling erosion at road located south of Agremax pile.
49	Concrete channel	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
50	Low wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
51	Run on outfall	☐Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Coal Stockpile				
52	Runoff pond	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
53	Super silt fence	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
54	Sediment trap	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
55	Concrete swale	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
56	Wheel washer	☑Yes ☐No	☐ Maintenance ☐ Repair ☐Replacement	~~The silt fence installed at the heavy equipment washing area was replaced.~~
57	Riprap in channel and slopes	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Heavy Equipment Maintenance Shop				
61	Floor grating	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
62	Oil / Water Separator	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
63	Used oil storage tank and drums secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
64	Recyclable metals roll-off container cover	☐Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
Warehouse / Urea Storage Building				
65	Access road gravel cover	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
66	Earthen berm on west side	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
67	Low wall on north side	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
68	Trapezoidal swale	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Open Area West of Cooling Tower				
69	Gravel cover	☐Yes ☑No	☑ Maintenance ☐ Repair ☐ Replacement	
70	Slope liners	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Cooling Tower				
71	Secondary containment dike	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Water Treatment				
72	Sludge roll- off container inside clean grating	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
73	Soda ash silo secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
74	Acid / caustic tank truck unloading secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Access Road West of Power Plant				
75	Catch basin inserts	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
76	Curb inlet	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
77	Concrete berm w/ shallow gutter and curb inlet	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
78	Mercury control chemicals covered storage dike	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Storm Water Runoff Pond				
80	Concrete weir	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	

ID.	Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
81	Riprap channel	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
82	Sediment accumulation control	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
83	Chemicals secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Road North of Coal Pile Runoff Pond				
85	Coal pile runoff pond	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
86	Low wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
87	Riprap in channel and slopes	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
88	Concrete wall	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
89	Concrete beam	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
90	Box culvert	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
91	Sampling Point Outfall 003	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
Marine Dock				
92	Collection manifold	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
93	Pier secondary containment	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
94	Sampling Point Outfall 001	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	
95	Conveyor TCI	☑Yes ☐No	☐ Maintenance ☐ Repair ☐ Replacement	

Areas of Industrial Materials or Activities exposed to stormwater
Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed or Completed and Notes
1	Material loading/unloading and storage areas (Agremax, limestone, coal storage)	☑Yes ❑No ❑ N/A	
2	Heavy equipment operations and maintenance areas	☑Yes ❑No ❑ N/A	
3	Fueling areas (heavy equipment fueling and storage tank unloading)	☑Yes ❑No ❑ N/A	
4	Outdoor vehicle and equipment washing areas	☑Yes ❑No ❑ N/A	
5	Waste handling and disposal areas	☑Yes ❑No ❑ N/A	
6	Erodible stockpiles (coal, Agremax)	☑Yes ❑No ❑ N/A	
7	Non-stormwater/ illicit connections	❑Yes ❑No ☑ N/A	
8	Dust generation and vehicle tracking	☑Yes ❑No ❑ N/A	
9	Water Treatment Area	☑Yes ❑No ❑ N/A	
10	Power Block Area	☑Yes ❑No ❑ N/A	
11	Administration Building Area	☑Yes ❑No ❑ N/A	
12	2 Million- gallon and 18 Million-gallon Pond Area	☑Yes ❑No ❑ N/A	
13	Marine Dock Area	☑Yes ❑No ❑ N/A	
14	Stormwater Sample Point 001	☑Yes ❑No ❑ N/A	
15	Stormwater Sample Point 002	❑Yes ☑No ❑ N/A	A diversion system will be constructed as an additional erosion control at that drainage area.

	Area/Activity	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed or Completed and Notes
16	Stormwater Sample Point 003	☑Yes ❑No ❑ N/A	
17	Run-on storm water conveyance system	☑Yes ❑No ❑ N/A	
18	Run-off storm water conveyance system	☑Yes ❑No ❑ N/A	
19	Process water conveyance system	☑Yes ❑No ❑ N/A	
20	CDS/ESP Area	☑Yes ❑No ❑ N/A	
21	Polymer application at 2 MM-gallon pond area	☑Yes ❑No ❑ N/A	
22	18 MM-gallon Pond Transfer Pumps	☑Yes ❑No ❑ N/A	
23	Coal Crusher Building	☑Yes ❑No ❑ N/A	
24	Portable Toilets	☑Yes ❑No ❑ N/A	

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

An evaluation of the storm water drainage has been performed in order to reduce potential sedimentation at outfall 002. A diversion system has been proposed in order to address erosion potential from the road located south from the Agremax pile.

Notes

Use this space for any additional notes or observations from the inspection:

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title: Pedro E. Labayen / SHO Compliance Coordinator

Signature: Pedro E. Labayen **Date:** March 23, 2017

ATTACHMENT NO. 16

November 15, 2017 Corrective Action Documentation

AES
Puerto Rico

Corrective Action Documentation – 4th Quarter 2017

Instructions:

Within 24 hours of becoming aware of a condition identified in Parts 4.1 or 4.2 of the 2015 MSGP, document the existence of the condition and subsequent actions. Note that this information must be summarized in the annual report (as required in Part 7.5 of the 2015 MSGP).

Corrective Action #1

Description of Condition: Silt fence installed at the coal pile storage area was affected by hurricane Maria.

Date: November 15, 2017.

Immediate Actions: Coal pile was regraded and slope terraces were established for erosion control. A buffer zone between the pile storage area and the stormwater channel have been maintained.

Actions Taken within 14 Days:

14 Day Infeasibility: Hurricanes Irma and Maria.

45 Day Extension:

Date Completed:

Photo #1: South side of the coal pile storage area.

ATTACHMENT NO. 17

Sampling equipment repair and installation

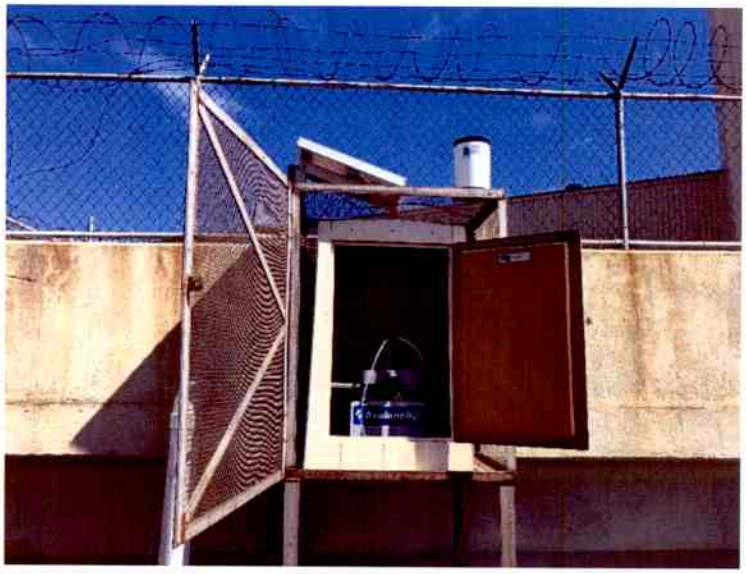


Photo: Automatic Stormwater Sampler installed at Outfall 001.

Date taken: October 24, 2018 2:11 pm

Photo: Automatic Stormwater Sampler installed at Outfall 001.

Date taken: October 24, 2018 2:12 pm

Photo: Automatic Stormwater Sampler installed at Outfall 002.

Date taken: October 24, 2018 5:01 pm

Photo: Automatic Stormwater Sampler installed at Outfall 003.

Date taken: October 24, 2018 4:27 pm

Photo: Cleaning activities using the vacuum truck and water truck at outfall 002.

Date taken: October 25, 2018 9:12 am

Photo: Cleaning activities using the vacuum truck and water truck at outfall 002.

Date taken: October 25, 2018 9:18 am

Photo: Stormwater grating drain guards replacement at outfall 002.

Date taken: October 25, 2018 9:56 am

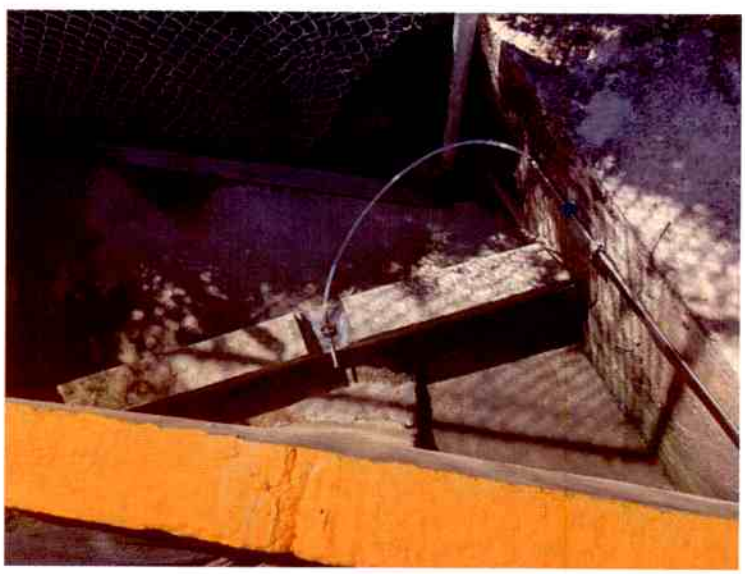


Photo: Outfall 002.

Date taken: October 25, 2018 1:30 pm

ATTACHMENT NO. 18

Rainfall Data for 2016 Third Quarter

Date	Time	Temp Out	Out Hum	Dew Pt.	Wind Speed	Wind Dir	Rain	Rain Rate
7/20/2016	12:30 AM	---	---	---	0	---	0	0
7/20/2016	1:00 AM	---	---	---	0	---	0	0
7/20/2016	1:30 AM	---	---	---	0	---	0	0
7/20/2016	2:00 AM	---	---	---	0	---	0	0
7/20/2016	2:30 AM	---	---	---	0	---	0	0
7/20/2016	3:00 AM	---	---	---	0	---	0	0
7/20/2016	3:30 AM	---	---	---	0	---	0	0
7/20/2016	4:00 AM	---	---	---	0	---	0	0
7/20/2016	4:30 AM	---	---	---	0	---	0	0
7/20/2016	5:00 AM	---	---	---	0	---	0	0
7/20/2016	5:30 AM	---	---	---	0	---	0	0
7/20/2016	6:00 AM	---	---	---	0	---	0	0
7/20/2016	6:30 AM	---	---	---	0	---	0	0
7/20/2016	7:00 AM	---	---	---	0	---	0	0
7/20/2016	7:30 AM	80	87	75.8	13	E	0	0
7/20/2016	8:00 AM	78.5	90	75.3	16	E	0	0
7/20/2016	8:30 AM	79.4	87	75.2	11	ENE	0	0
7/20/2016	9:00 AM	81.3	84	76	11	E	0	0
7/20/2016	9:30 AM	81.6	86	77	13	E	0.01	0
7/20/2016	10:00 AM	83.3	82	77.2	20	SE	0	0
7/20/2016	10:30 AM	83.4	84	78.1	21	SE	0	0
7/20/2016	11:00 AM	83.6	77	75.6	22	SE	0	0
7/20/2016	11:30 AM	83.5	82	77.4	23	SE	0	0
7/20/2016	12:00 PM	83.5	82	77.4	23	SE	0	0
7/20/2016	12:30 PM	82.8	82	76.7	22	SE	0	0
7/20/2016	1:00 PM	83.3	79	76.1	21	SE	0	0
7/20/2016	1:30 PM	83.4	82	77.3	19	SE	0	0
7/20/2016	2:00 PM	83.9	82	77.8	17	SSE	0	0
7/20/2016	2:30 PM	81.8	89	78.2	15	S	0	0
7/20/2016	3:00 PM	80	88	76.1	17	SSE	0.05	0.42
7/20/2016	3:30 PM	82.4	87	78.1	17	SSE	0.01	0.42
7/20/2016	4:00 PM	79.1	88	75.2	15	SSE	0.03	0.62
7/20/2016	4:30 PM	82.1	85	77.1	12	SE	0	0
7/20/2016	5:00 PM	82.7	86	78.1	10	SSE	0	0
7/20/2016	5:30 PM	83.7	81	77.2	12	SE	0	0
7/20/2016	6:00 PM	81.1	88	77.2	10	SSE	0	0
7/20/2016	6:30 PM	79.6	89	76.1	16	S	0	0
7/20/2016	7:00 PM	80.1	85	75.2	14	S	0	0
7/20/2016	7:30 PM	80.8	87	76.6	9	S	0	0
7/20/2016	8:00 PM	81.9	82	75.9	7	ENE	0	0
7/20/2016	8:30 PM	82.4	80	75.6	9	ENE	0	0
7/20/2016	9:00 PM	81.7	83	76	11	E	0	0
7/20/2016	9:30 PM	81.5	83	75.8	12	E	0	0
7/20/2016	10:00 PM	80.1	84	74.8	11	E	0.01	0.32
7/20/2016	10:30 PM	---	---	---	0	---	0	0
7/20/2016	11:00 PM	---	---	---	0	---	0	0
7/20/2016	11:30 PM	---	---	---	0	---	0	0
7/21/2016	12:00 AM	---	---	---	0	---	0	0

Date	Time	Temp Out	Out Hum	Dew Pt.	Wind Speed	Wind Dir	Rain	Rain Rate
7/25/2016	12:30 AM	80	81	73.6	12	E	0	0
7/25/2016	1:00 AM	79.9	81	73.5	11	ENE	0	0
7/25/2016	1:30 AM	75.2	89	71.7	15	ENE	0.23	1.97
7/25/2016	2:00 AM	76.5	88	72.7	10	E	0.02	0.55
7/25/2016	2:30 AM	76.7	83	71.1	12	ENE	0	0
7/25/2016	3:00 AM	77.3	81	71	10	NE	0	0
7/25/2016	3:30 AM	78	84	72.8	9	ENE	0	0
7/25/2016	4:00 AM	75.6	87	71.5	11	ENE	0.18	2.35
7/25/2016	4:30 AM	76.7	82	70.8	8	NE	0	0
7/25/2016	5:00 AM	77	81	70.7	11	ENE	0	0
7/25/2016	5:30 AM	78	82	72.1	12	E	0	0
7/25/2016	6:00 AM	79	81	72.7	13	E	0	0
7/25/2016	6:30 AM	79.5	81	73.2	13	E	0	0
7/25/2016	7:00 AM	79.4	78	71.9	14	E	0	0
7/25/2016	7:30 AM	79.7	79	72.6	14	E	0	0
7/25/2016	8:00 AM	81.2	78	73.7	14	E	0	0
7/25/2016	8:30 AM	82.3	80	75.5	14	ESE	0	0
7/25/2016	9:00 AM	82.7	78	75.1	18	SE	0	0
7/25/2016	9:30 AM	82.7	78	75.1	20	SE	0	0
7/25/2016	10:00 AM	83.2	78	75.6	19	SE	0	0
7/25/2016	10:30 AM	82.9	80	76.1	19	SE	0	0
7/25/2016	11:00 AM	83.5	77	75.5	18	SE	0	0
7/25/2016	11:30 AM	83.6	77	75.6	19	SSE	0	0
7/25/2016	12:00 PM	83.7	78	76.1	18	SSE	0	0
7/25/2016	12:30 PM	83.8	77	75.8	17	SE	0	0
7/25/2016	1:00 PM	83.9	78	76.3	17	SSE	0	0
7/25/2016	1:30 PM	83.7	79	76.5	18	SSE	0	0
7/25/2016	2:00 PM	83.5	79	76.3	18	SSE	0	0
7/25/2016	2:30 PM	---	---	---	19	SSE	0	0
7/25/2016	3:00 PM	---	---	---	0	---	0	0
7/25/2016	3:30 PM	---	---	---	0	---	0	0
7/25/2016	4:00 PM	---	---	---	0	---	0	0
7/25/2016	4:30 PM	---	---	---	0	---	0	0
7/25/2016	5:00 PM	---	---	---	0	---	0	0
7/25/2016	5:30 PM	---	---	---	0	---	0	0
7/25/2016	6:00 PM	---	---	---	0	---	0	0
7/25/2016	6:30 PM	---	---	---	0	---	0	0
7/25/2016	7:00 PM	---	---	---	0	---	0	0
7/25/2016	7:30 PM	---	---	---	0	---	0	0
7/25/2016	8:00 PM	---	---	---	0	---	0	0
7/25/2016	8:30 PM	---	---	---	0	---	0	0
7/25/2016	9:00 PM	---	---	---	0	---	0	0
7/25/2016	9:30 PM	---	---	---	0	---	0	0
7/25/2016	10:00 PM	81.1	80	74.3	11	E	0	0
7/25/2016	10:30 PM	81.3	78	73.8	9	ENE	0	0
7/25/2016	11:00 PM	81.2	78	73.7	6	E	0	0
7/25/2016	11:30 PM	---	---	---	8	ENE	0	0
7/26/2016	12:00 AM	---	---	---	0	---	0	0

Date	Time	Temp Out	Out Hum	Dew Pt.	Wind Speed	Wind Dir	Rain	Rain Rate
8/10/2016	12:30 AM	78.5	84	73.3	16	E	0	0
8/10/2016	1:00 AM	78.5	85	73.6	15	E	0	0
8/10/2016	1:30 AM	77.5	87	73.3	15	ESE	0.01	0
8/10/2016	2:00 AM	77.5	86	73	13	ENE	0	0
8/10/2016	2:30 AM	77	88	73.2	12	SE	0	0
8/10/2016	3:00 AM	78.2	83	72.6	9	ENE	0	0
8/10/2016	3:30 AM	76.9	88	73.1	10	ENE	0.01	0
8/10/2016	4:00 AM	78.4	83	72.8	9	E	0	0
8/10/2016	4:30 AM	78	84	72.8	8	ENE	0	0
8/10/2016	5:00 AM	78.6	83	73	10	ENE	0	0
8/10/2016	5:30 AM	78.9	82	72.9	10	ENE	0	0
8/10/2016	6:00 AM	77.9	86	73.4	12	E	0	0
8/10/2016	6:30 AM	78.9	82	72.9	10	ENE	0	0
8/10/2016	7:00 AM	79.6	81	73.3	11	E	0	0
8/10/2016	7:30 AM	79.5	82	73.5	11	E	0	0
8/10/2016	8:00 AM	79	84	73.7	12	ESE	0	0
8/10/2016	8:30 AM	77.6	86	73.1	13	ENE	0	0
8/10/2016	9:00 AM	79.7	80	73	9	ENE	0	0
8/10/2016	9:30 AM	82.4	79	75.2	9	ENE	0	0
8/10/2016	10:00 AM	81.6	79	74.5	12	ESE	0	0
8/10/2016	10:30 AM	75.7	89	72.2	12	S	0.02	1.01
8/10/2016	11:00 AM	76.8	90	73.6	11	SSE	0.1	2.21
8/10/2016	11:30 AM	79.5	88	75.6	7	SSE	0	0
8/10/2016	12:00 PM	82.4	83	76.7	8	E	0	0
8/10/2016	12:30 PM	83.3	79	76.1	15	SE	0	0
8/10/2016	1:00 PM	83.2	78	75.6	17	SSE	0	0
8/10/2016	1:30 PM	83.5	77	75.5	17	SE	0	0
8/10/2016	2:00 PM	83.7	79	76.5	17	SSE	0	0
8/10/2016	2:30 PM	82.9	79	75.7	17	SSE	0	0
8/10/2016	3:00 PM	82.8	79	75.6	18	SE	0	0
8/10/2016	3:30 PM	83.2	76	74.8	19	SE	0	0
8/10/2016	4:00 PM	83.3	78	75.7	18	SE	0	0
8/10/2016	4:30 PM	83.2	80	76.4	18	SE	0	0
8/10/2016	5:00 PM	83.1	78	75.5	16	SE	0	0
8/10/2016	5:30 PM	83.1	78	75.5	16	SE	0	0
8/10/2016	6:00 PM	83.1	77	75.1	15	SE	0	0
8/10/2016	6:30 PM	82.7	79	75.5	15	SE	0	0
8/10/2016	7:00 PM	81.8	78	74.3	13	ESE	0	0
8/10/2016	7:30 PM	79.6	82	73.6	12	ENE	0	0
8/10/2016	8:00 PM	80.8	81	74.4	9	ENE	0	0
8/10/2016	8:30 PM	80.7	84	75.4	8	ENE	0	0
8/10/2016	9:00 PM	80.9	83	75.2	9	ENE	0	0
8/10/2016	9:30 PM	80.9	82	74.9	10	E	0	0
8/10/2016	10:00 PM	80.7	83	75.1	11	E	0	0
8/10/2016	10:30 PM	80.9	82	74.9	9	E	0	0
8/10/2016	11:00 PM	80.9	81	74.5	8	ENE	0	0
8/10/2016	11:30 PM	80.7	81	74.3	7	ENE	0	0
8/11/2016	12:00 AM	80.9	81	74.5	8	E	0	0

Date	Time	Temp Out	Out Hum	Dew Pt.	Wind Speed	Wind Dir	Wind Run	Rain	Rain Rate
8/26/2016	12:30 AM	81.5	82	75.5	12	E	6	0	0
8/26/2016	1:00 AM	81.5	81	75.1	11	E	5.5	0	0
8/26/2016	1:30 AM	81.2	82	75.2	13	E	6.5	0	0
8/26/2016	2:00 AM	81.3	82	75.3	11	E	5.5	0	0
8/26/2016	2:30 AM	81.2	82	75.2	13	E	6.5	0	0
8/26/2016	3:00 AM	81.3	82	75.3	12	E	6	0	0
8/26/2016	3:30 AM	81.5	82	75.5	14	ESE	7	0	0
8/26/2016	4:00 AM	79.2	89	75.7	12	E	6	0.02	0.33
8/26/2016	4:30 AM	80.4	85	75.5	11	E	5.5	0	0
8/26/2016	5:00 AM	80.8	84	75.5	12	E	6	0	0
8/26/2016	5:30 AM	81.2	84	75.9	12	E	6	0	0
8/26/2016	6:00 AM	77.1	90	73.9	12	S	6	0.34	2.37
8/26/2016	6:30 AM	78.2	89	74.7	5	NNW	2.5	0.02	0.4
8/26/2016	7:00 AM	77.3	90	74.1	5	N	2.5	0.01	0
8/26/2016	7:30 AM	79.6	90	76.4	9	SE	4.5	0.03	0.1
8/26/2016	8:00 AM	79.8	87	75.6	16	SSE	8	0	0
8/26/2016	8:30 AM	78.7	87	74.5	17	E	8.5	0.01	0
8/26/2016	9:00 AM	78.9	89	75.4	12	E	6	0	0
8/26/2016	9:30 AM	79.9	88	76	11	E	5.5	0	0
8/26/2016	10:00 AM	81.1	87	76.9	12	ESE	6	0.01	0
8/26/2016	10:30 AM	81.8	86	77.2	12	SE	6	0	0
8/26/2016	11:00 AM	82.3	83	76.6	13	SSE	6.5	0	0
8/26/2016	11:30 AM	82.7	82	76.6	13	SSE	6.5	0	0
8/26/2016	12:00 PM	82.6	81	76.2	11	SSE	5.5	0	0
8/26/2016	12:30 PM	82.6	82	76.5	10	SSE	5	0	0
8/26/2016	1:00 PM	82.7	82	76.6	11	SSE	5.5	0	0
8/26/2016	1:30 PM	82.8	81	76.4	12	SSE	6	0	0
8/26/2016	2:00 PM	82.3	83	76.6	14	SE	7	0	0
8/26/2016	2:30 PM	81.8	83	76.1	13	SSE	6.5	0	0
8/26/2016	3:00 PM	82.8	82	76.7	14	SSE	7	0	0
8/26/2016	3:30 PM	82	81	75.6	13	SSE	6.5	0	0
8/26/2016	4:00 PM	82.5	82	76.4	12	SSE	6	0	0
8/26/2016	4:30 PM	81	83	75.3	14	S	7	0	0
8/26/2016	5:00 PM	81.1	85	76.2	10	S	5	0	0
8/26/2016	5:30 PM	81.9	84	76.6	6	S	3	0	0
8/26/2016	6:00 PM	82	82	76	5	SE	2.5	0	0
8/26/2016	6:30 PM	85.4	80	78.5	3	NW	1.5	0	0
8/26/2016	7:00 PM	79.8	86	75.2	9	NW	4.5	0	0
8/26/2016	7:30 PM	78.6	88	74.7	11	NW	5.5	0	0
8/26/2016	8:00 PM	78.2	85	73.3	7	NNW	3.5	0.11	1.47
8/26/2016	8:30 PM	85	84	79.6	4	SSW	2	0.05	0.38
8/26/2016	9:00 PM	86.3	74	77	2	SSW	1	0	0
8/26/2016	9:30 PM	80.3	77	72.4	2	W	1	0	0
8/26/2016	10:00 PM	83.7	75	74.9	3	S	1.5	0	0
8/26/2016	10:30 PM	81.3	79	74.2	4	SSW	2	0	0
8/26/2016	11:00 PM	77.7	88	73.9	13	S	6.5	0	0
8/26/2016	11:30 PM	77.1	88	73.3	12	SE	6	0	0
8/27/2016	12:00 AM	77.4	89	73.9	4	ENE	2	0.07	0.22

Date	Time	Temp Out	Out Hum	Dew Pt.	Wind Speed	Wind Dir	Rain	Rain Rate
9/2/2016	12:30 AM	80.6	83	75	12	E	0	0
9/2/2016	1:00 AM	79.5	87	75.3	13	E	0.03	0.37
9/2/2016	1:30 AM	80.2	85	75.3	10	ENE	0	0
9/2/2016	2:00 AM	78.9	89	75.4	10	S	0.05	0.97
9/2/2016	2:30 AM	80.2	85	75.3	7	E	0	0
9/2/2016	3:00 AM	81	83	75.3	11	E	0	0
9/2/2016	3:30 AM	81.1	83	75.4	8	ENE	0	0
9/2/2016	4:00 AM	81.1	82	75.1	8	ENE	0	0
9/2/2016	4:30 AM	81.2	82	75.2	7	ENE	0	0
9/2/2016	5:00 AM	81.3	82	75.3	8	E	0	0
9/2/2016	5:30 AM	81	83	75.3	8	ENE	0	0
9/2/2016	6:00 AM	81	83	75.3	9	E	0	0
9/2/2016	6:30 AM	81.3	83	75.6	11	ENE	0	0
9/2/2016	7:00 AM	81.2	83	75.5	11	ENE	0	0
9/2/2016	7:30 AM	81.2	84	75.9	11	E	0	0
9/2/2016	8:00 AM	81.6	84	76.3	12	E	0	0
9/2/2016	8:30 AM	83	83	77.3	14	ESE	0.01	0
9/2/2016	9:00 AM	83.6	81	77.1	18	SE	0	0
9/2/2016	9:30 AM	81.1	79	74	19	SE	0.01	0
9/2/2016	10:00 AM	81.7	82	75.7	18	SE	0.01	0
9/2/2016	10:30 AM	82.7	83	77	16	ESE	0	0
9/2/2016	11:00 AM	83.6	82	77.5	18	SE	0	0
9/2/2016	11:30 AM	83.2	82	77.1	17	SSE	0	0
9/2/2016	12:00 PM	83.6	78	76	13	SSE	0	0
9/2/2016	12:30 PM	83.5	80	76.7	13	SSE	0	0
9/2/2016	1:00 PM	83.2	80	76.4	14	SSE	0	0
9/2/2016	1:30 PM	83.7	83	78	13	SSE	0	0
9/2/2016	2:00 PM	83.8	81	77.3	15	SSE	0	0
9/2/2016	2:30 PM	84.3	80	77.5	16	SE	0	0
9/2/2016	3:00 PM	83.2	80	76.4	21	SE	0	0
9/2/2016	3:30 PM	84.3	77	76.3	19	SE	0	0
9/2/2016	4:00 PM	84.5	80	77.6	16	SE	0	0
9/2/2016	4:30 PM	83.9	81	77.4	18	SE	0	0
9/2/2016	5:00 PM	83.9	83	78.2	18	SSE	0	0
9/2/2016	5:30 PM	82.7	81	76.3	19	SE	0	0
9/2/2016	6:00 PM	82.7	82	76.6	12	ENE	0	0
9/2/2016	6:30 PM	82.4	82	76.3	12	E	0	0
9/2/2016	7:00 PM	82.1	83	76.4	11	E	0	0
9/2/2016	7:30 PM	82.1	83	76.4	10	E	0	0
9/2/2016	8:00 PM	82.1	83	76.4	10	E	0	0
9/2/2016	8:30 PM	82.2	82	76.2	9	ENE	0	0
9/2/2016	9:00 PM	82.3	82	76.3	10	ENE	0	0
9/2/2016	9:30 PM	82	82	76	12	E	0	0
9/2/2016	10:00 PM	81.9	81	75.5	12	E	0	0
9/2/2016	10:30 PM	81.2	83	75.5	11	ENE	0	0
9/2/2016	11:00 PM	81.4	83	75.7	11	E	0	0
9/2/2016	11:30 PM	81.3	82	75.3	12	E	0	0
9/3/2016	12:00 AM	81.2	83	75.5	12	E	0	0

Date	Time	Temp Out	Out Hum	Dew Pt.	Wind Speed	Wind Dir	Rain	Rain Rate
9/22/2016	12:30 AM	81.8	77	73.9	3	NE	0	0
9/22/2016	1:00 AM	80.9	79	73.8	3	NE	0	0
9/22/2016	1:30 AM	86.8	72	76.7	2	NE	0	0
9/22/2016	2:00 AM	85.8	72	75.7	2	NNE	0	0
9/22/2016	2:30 AM	83.4	74	74.2	3	NNE	0	0
9/22/2016	3:00 AM	86	69	74.6	1	NW	0	0
9/22/2016	3:30 AM	86.1	72	76	2	NW	0	0
9/22/2016	4:00 AM	82.2	76	73.9	2	NW	0	0
9/22/2016	4:30 AM	81.7	77	73.8	3	NW	0	0
9/22/2016	5:00 AM	80.2	78	72.7	3	NW	0	0
9/22/2016	5:30 AM	80.6	78	73.1	2	NW	0	0
9/22/2016	6:00 AM	81.4	77	73.5	0	NW	0	0
9/22/2016	6:30 AM	80.4	78	72.9	1	NW	0	0
9/22/2016	7:00 AM	80.7	78	73.2	2	NW	0	0
9/22/2016	7:30 AM	81.8	76	73.5	3	NW	0	0
9/22/2016	8:00 AM	82.8	79	75.6	2	NNE	0	0
9/22/2016	8:30 AM	83.4	77	75.4	2	SE	0	0
9/22/2016	9:00 AM	84.4	74	75.2	3	SSE	0	0
9/22/2016	9:30 AM	84.6	72	74.6	5	S	0	0
9/22/2016	10:00 AM	87.4	68	75.5	4	S	0	0
9/22/2016	10:30 AM	89.9	65	76.6	4	SSW	0	0
9/22/2016	11:00 AM	84.1	75	75.3	8	SSW	0	0
9/22/2016	11:30 AM	84.7	75	75.9	8	SSW	0	0
9/22/2016	12:00 PM	86.1	73	76.4	7	SSW	0	0
9/22/2016	12:30 PM	86.4	75	77.5	7	SSW	0	0
9/22/2016	1:00 PM	84.7	75	75.9	7	SSW	0	0
9/22/2016	1:30 PM	84.4	76	76	8	SSW	0	0
9/22/2016	2:00 PM	84.6	76	76.2	8	SSW	0	0
9/22/2016	2:30 PM	85.1	76	76.7	7	SSW	0	0
9/22/2016	3:00 PM	84.9	77	76.9	7	SSW	0	0
9/22/2016	3:30 PM	85.1	77	77.1	6	SSW	0	0
9/22/2016	4:00 PM	84.3	79	77.1	7	SSW	0	0
9/22/2016	4:30 PM	87	74	77.7	5	S	0	0
9/22/2016	5:00 PM	88.5	71	77.9	5	SW	0	0
9/22/2016	5:30 PM	86.4	73	76.7	4	W	0	0
9/22/2016	6:00 PM	85	75	76.2	5	W	0	0
9/22/2016	6:30 PM	84.2	75	75.4	5	NW	0	0
9/22/2016	7:00 PM	81.9	81	75.5	5	NE	0	0
9/22/2016	7:30 PM	80.3	84	75	7	ENE	0	0
9/22/2016	8:00 PM	80.2	83	74.6	5	ENE	0	0
9/22/2016	8:30 PM	79.4	83	73.8	8	SSE	0.28	4.54
9/22/2016	9:00 PM	79.5	85	74.6	3	E	0.16	1.89
9/22/2016	9:30 PM	78.6	88	74.7	6	NW	0.02	0.1
9/22/2016	10:00 PM	79.4	88	75.5	6	NW	0	0
9/22/2016	10:30 PM	78.5	88	74.6	7	NNW	0	0
9/22/2016	11:00 PM	79.2	85	74.3	6	N	0	0
9/22/2016	11:30 PM	80.2	81	73.8	3	NNE	0	0
9/23/2016	12:00 AM	79.6	83	74	1	NNE	0	0

ATTACHMENT NO. 19

Updated Pollution Prevention Team Members list

AES Puerto Rico, LP
Storm Water Pollution Prevention Plan

POLLUTION PREVENTION TEAM MEMBERS	Worksheet No.1 Date: July 2018

Leader: Hector Avila Title: Environmental Coordinator

Office Phone: 787-866-8117 ext. 2266

Responsibilities: Storm Water Pollution Prevention and Spill Prevention Control and Countermeasures Plan Administrator. Responsible for all environmental aspects of this plan. Coordinate the development and implementation of this plan. Arrange plant wide training related to this plan, keep necessary records and reports. Ensure the facilities Structural and Non – Structural Best Management Practices (BMP's) are implemented.

Members:

(1) Pedro E. Labayen Title: Storm Water Compliance Coordinator

Office Phone: 787-866-8117 ext. 2215

Responsibilities: (i) overseeing the preparation, amendment, and certification of the SWPPP; (ii) providing and/or coordinating applicable environmental training to the Facility's personnel; (iii)conducting quarterly and routine inspections; (iv) assisting employees and/or contractors with the installation, maintenance and improvements of non-structural and structural BMP's (v) conducting comprehensive site inspections; (vi) determining if appropriate actions have been timely made to address compliance violations or to make improvements to BMP's; (vii) coordinating the pick-up and analysis of storm water samples; (viii) monitoring compliance with this Order; and (ix) preparing and submitting Reports to EPA.

(2) Rafael Quintana Title: Maintenance Manager
Office Phone: 787-866-8117 ext. 2208

Responsibilities: Ensure the implementation and development of this plan.

(3) Elias Sostre Title: Operations Manager

Office Phone: 787-866-8117 ext. 2257

Responsibilities: Ensure the facilities operations "Best Management Practices" are followed.

(4) Arnaldo Pomales Title: Material Handling Team Leader
Office Phone: 787-866-8117 ext. 2240

Responsibilities: Ensure the facilities "Best Management Practices" related to the receiving, storage and processing of coal, limestone and ash are followed.

(5) Carlos Gonzalez Title: Coal Combustion Products Team Leader

Office Phone: 787-866-8117 ext. 2239

Responsibilities: Ensure the facilities "Dust Control Plan" and "Best Management Practices" related to the management, processing and storage of coal combustion products are followed.

Other Team members:

1. Henrick Roman – Shared Services Supervisor
2. Carlos Alequin – Maintenance Team Leader
3. Marco Aresti – Operations Team Leader

The Team will be responsible for the development and implementation of this Plan. Other key responsibilities are:

1. Implementing all MSGP and SWPPP requirements.
2. Defining and agreeing upon an appropriate set of goals for the facility's storm water management program.
3. Periodically update the SWPPP, whenever there is a change in the process design, construction, operation or maintenance of equipment and physical plant, which may have an effect on the potential for the discharge of pollutants to the environment.

AES Puerto Rico, LP
Storm Water Pollution Prevention Plan

POLLUTANTS SOURCE IDENTIFICATION	Worksheet No.4 Date: March 2017

This list identifies all storm water pollutant sources exposed to rainfall and/or runoff and describes existing management practices that address those sources. The third column, lists BMP options that can be incorporated into the Plan to address remaining sources of pollutants.

Storm water Pollutant Sources	Existing Management Practices	Description of New BMP Options
Coal/ limestone/ash/ manufactured aggregate stockpiling and transfer	Wheel washers for trucks, water spray at truck loading for dry ash. Sweeping, water truck. Sprinkle for Agremax pile, dome for limestone storage, covered conveyor for coal transfer, gabions wall for agremax pile, coal pile runoff pond for agremax and coal runoff, sediment trap for agremax and coal conveyance system.	
Fuel and oil loading/unloading/ storage and transfer	Secondary containment for truck unloading and for fuel oil storage tank.	
Chemicals loading/unloading/storage and transfer	Secondary containment for all chemical unloading areas. Secondary containment for all chemical containers and bulk storage.	
Heavy equipment maintenance area	Oil separator	
Portable toilets	Anchors	
Herbicide application	Use as required by law and by certified person.	
Scrap yard and solid waste storage	Roll over tarps for bulk waste storage, covers for all waste containers, tarp to cover scrap materials.	
Cooling tower	Secondary containment for cooling tower, proper chemical application to avoid foaming.	
Limestone silo	Secondary containment.	
ESP and CDS Area	Secondary containment.	
Oil Storage	Secondary containment	
Water Treatment Area	Secondary containment	

POLLUTANTS SOURCE IDENTIFICATION	Worksheet No.4 Date: March 2017

This list identifies all storm water pollutant sources exposed to rainfall and/or runoff and describes existing management practices that address those sources. The third column, lists BMP options that can be incorporated into the Plan to address remaining sources of pollutants.

Storm water Pollutant Sources	Existing Management Practices	Description of New BMP Options
Non-storm water stream. Condensate from steam line.	Visual inspection and cap all drains.	
Settleable solids in concrete channel.	Sweep street and water truck wash. Stabilization for all slopes.	
Off-site tracking of sediments.	Wheel washer and truck cleaning before leaving the plant.	
Debris from landscape maintenance.	Maintenance and inspection protocol for contractors or facility personnel must adhere during landscape maintenance.	
Significant spills	SPCC Plan	
Wind-blown dust	Sprinkles, water truck, speed limits, aggregate cover for roads.	

ATTACHMENT NO. 20

Evidence of submission of Annual Report

2015 NPDES Multi-Sector General Permit For Stormwater Discharges Associated With Industrial Activity (MSGP) Forms

United States Environmental Protection Agency
1200 Pennsylvania Ave, NW Washington, DC 20460

Permit Information (* indicates form required data)

What action would you like to take? *

New Industrial Stormwater Annual Report

Enter the NPDES ID corresponding to the facility for which you would like to submit an Annual Report and click the Submit button.

NPDES ID *

PRR053093: AES PUERTO RICO, LP

☒ Confirm NPDES ID: PRR053093: AES PUERTO RICO, LP *

Facility Information

Facility Name

AES Puerto Rico, L.P.

Street

Road #3 km. 142 Jobos Ward

Supplemental address

City

Guayama

State

Puerto Rico

Zip Code

00784

First Name

Manuel

Middle Name

Last Name

Mata

Telephone Number

7878668117

Summary of past year's inspections, assessments, and corrective actions

1. Provide a summary of your past year's routine facility inspection documentation (see Part 3.1.2 of the permit). In addition, if you are an operator of an airport facility (Sector S) that is subject to the airport effluent limitations guidelines, and are complying with the MSGP Part 8.S.8.1 effluent limitation through the use of non-urea-containing deicers, provide a statement certifying that you do not use airfield pavement deicers containing urea (e.g., *"I certify that [name of airport] is in compliance with the effluent limitation guideline for airfield pavement deicing by not using airfield pavement deicers that contain urea."*). [Note: Operators of airport facilities that are complying with Part 8.S.8.1 by meeting the numeric effluent limitation for ammonia do not need to include this statement.] *

Four quarterly routine facility inspections were performed by the Storm Water Environmental Coordinator on past year 2016. Minor findings were identified on the first routine inspection completed on February 22, 2016. An open area west of the cooling towers and other uncovered areas that should be covered with gravel were identified and reported to provide corrective actions. During this inspection it was identified that the storm water sampling equipment required technical corrections. Troubleshooting and technical support was requested to an external company in order to ensure proper functioning of the sampling equipment. Most of the plant's BMP were observed and documented to be in good operating conditions during this first inspection. The second inspection was performed on May 26, 2016. In this inspection a water leakage from a joint segment of the ash wetting pipe located inside secondary containment was observed and reported to the maintenance department. A work notification was generated in order to perform the pipe reparation immediately. Corrective actions were verified and documented during this inspection. The rip rap located at Gate #3 was restored with new stone and a new liner was installed on the improved area. On the third inspection completed on August 25, 2016 several corrective actions were identified and documented. The oil drums storage area was cleaned and organized. Also, used oil and other oil drums were properly removed by a certified company for recycling. Another corrective action observed during this third quarter inspection includes cleaning and replacement of some of the drain guards inlet filters installed on grating at gate #3. The storm water sampling equipment were also tested and programed for proper functioning. The fourth routine inspection was performed on November 15, 2016 in the morning period. From this inspection it was checked that a damage segment of the super silt fence was replaced. This corrective action was coordinated and completed in an adequate time frame. All other plant BMP were observed to be working properly and no other changes or modifications were reported.

2. Provide a summary of your past year's quarterly visual assessment documentation (see Part 3.2.2 of the permit) *

Quarterly visual assessments were performed from the three sampling points (001, 002, 003) identified in the facility. Three storm water visual assessments were completed from sampling point #001 located at the dock area. Results from all visual inspections completed from this point showed no evidence of presence of solids or any other material in the discharged water. Four visual assessments were performed on storm water samples obtained from sampling point #002. On the first two quarter samples, visual assessment indicated the presence of settled and suspended solids in the discharged storm water. An uncovered area with erosion potential was identified at sampling point 002 drainage area. From these assessments, corrective actions were coordinated immediately and completed in an adequate time frame. Evaluated parameters from visual assessment at point 002 completed on the third and fourth quarter showed that BMP have been working effectively and no indications of pollutants were observed. No indications of the presence of pollutants were observed from the four visual assessment performed during past year 2016 at sampling point #003.

3. For any four-sample (minimum) average benchmark monitoring exceedance, if after reviewing the selection, design, installation and implementation of your control measures and considering whether any modifications are necessary to meet the effluent limits in the permit, you determine that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice, provide your rationale for why you believe no further reductions are achievable (see Part 6.2.1.2 of the permit). Enter "NA" if not applicable. *

NA

4. Provide a summary of your past year's corrective action documentation (See Part 4.4 of the permit). (Note: If corrective action is not yet completed at the time of submission of this annual report, you must describe the status of any outstanding corrective action(s).) Also describe any incidents of noncompliance in the past year or currently ongoing, or if none, provide a statement that you are in compliance with the permit. *

The following is a summary of the corrective actions completed and documented on past year 2016.

First Quarter:
1. A concrete berm was installed in order to segregate the sludge containment area.
2. The sagging pier pipe was repaired.
3. Road between the coal pile and mechanical shop was refilled with aggregate stone.
4. Rip rap located south of the AGREMAX pile was repaired and improve to control soil erosion.
5. Traffic road located south of the AGREMAX storage pile and the swale located at the east side of plant was covered with aggregate.

Second Quarter:
1. The rip rap located at the south side of the facility (Gate #3) was cleaned and improved.
2. Wheel washer and limestone dome exit road was improved with asphalt.
3. The automatic sampler "sunkeeper" and water sensor cable were replaced.

Third Quarter:
1. Cooling tower plastic media stored in a non-industrial activity area was removed in order to discourage unauthorized industrial activities in that area.
2. The mobile sweeper's tire was replaced on the same date that the condition was identified.
3. A section of the coal storage area located at the west of the limestone dome was organized and cleaned.
4. An inlet protection filter was installed on the storm water inlet located close to the 100-year channel.
5. A segment of the super silt fence used to protect the coal pile runoff collection channel was replaced.

Fourth Quarter:
1. A water leakage from the cooling tower circulating piping system used for power unit two was identified. The water has been recirculated back into the cooling tower basin using two submersible pumps and no process water was discharged.
2. Felt filter bags were installed in all storm water inlets at the dock area. Filtration felt is a low cost disposable media with particle retention from 1 to 200 microns. It has depth filtration qualities and high solids loading capacity.

Since no incidents of noncompliance occurred during past year 2016 and all corrective actions were coordinated and performed in an adequate time frame, it was concluded that AES Puerto Rico is in compliance with all terms and requirements of the MSGP 2015 permit.

Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. 40 CFR 122.22 (d)

(/enoi/secure/account/home.htm)

Menu

Submission Complete

You have successfully completed your 2. EPA Multi-sector General Permit (MSGP) Annual Report submission

Your Tracking Code is:

MSGP-AR-7377

Please record your tracking code. You may quote this number when enquiring about your application.

From Here

Begin a new form (https://net.epa.gov/enoi/form.htm?formCode=MSGP-AR)

OR

Download a PDF copy of your form (https://net.epa.gov/enoi/servlet/FormReceipt.pdf?submitKey=e346725d028b5ddb4d27cf581ad97112&renderMode=file&renderMode=file)

NeT is optimized for Firefox 42 and Internet Explorer 10 or higher with Adobe Acrobat/Reader version X or higher

Powered By Avoka Transact (http://www.avoka.com)

ATTACHMENT NO. 21

Stormwater Sampling Procedure (SOP)
(March 29, 2017)

AES Puerto Rico	Title: Storm Water Sampling Procedure	Doc #: SOP-Eng-003	Prepared by: Hector M. Avila	AES Puerto Rico Guayama, PR	Page: 1 of 1
	Reviewed by: Pedro E. Labayen	Area: Environmental / Operations	Effective Date: 03/23/2015	Review Date: 01/01/2020	Rev #3

Title:

Storm Water Sampling Procedure

Approvals:

	Signature	Date
Prepared by		4/15/2017
Reviewed by		4/15/2017
Operations Manager		5/9/2017
Safety Team Leader		5/1/2017
Plant Manager		5/9/2017

Distribution List:

1. Operations
2. Engineering
3. Maintenance
4. Environmental Files

Table of Contents

Appendices

I. Purpose

The purpose of this procedure is to establish specific guidelines for conducting storm water sampling activities, documenting them, submitting related reports and maintaining records according to the quarterly visual assessment and benchmark monitoring requirements of the Environmental Protection Agency's (EPA) 2015 Multi Sector General Permit for Storm Water Discharges from Industrial Activities (2015 MSGP), NPDES Permit PRR050000, Permit Tracking Number PRR053093.

II. Scope

This procedure establishes the steps to be followed to conduct, document, report and record storm water sampling events that will be representative of the site's discharges following good practices and taking the required safety precautions.

III. Responsibilities

A. The Plant Manager will ensure that this procedure is implemented and followed by the Storm Water Compliance Coordinator or Designee.

B. The Environmental Coordinator will be responsible of implementation and evaluation of this procedure.

C. The Storm Water Compliance Coordinator or Designee will be responsible for following the steps described in this procedure.

D. The Authorized Designees are the Operation Manager, Water Treatment Team Leader or any person trained on this procedure.

IV. Safety Precautions

A. All AES-PR employees and contractors must use the required safety and personal protective equipment for conducting the sampling or providing maintenance to the sampling equipment including but not limited to hard hats, safety glasses, safety boots and other as appropriate.

B. The Environmental Coordinator or Designee will be responsible for generating work orders and obtaining the necessary permit(s) to work for the sampling equipment maintenance activities.

V. Applicable Regulatory Requirements

Under the 2015 MSGP AES-PR is required to performing quarterly visual assessments and quarterly benchmark monitoring of all of its storm water discharges (outfalls) at least once per quarter. The quarterly periods are January 1-March 31; April 1-June 30; July 1-September 30; October 1-December 31.

EPA has grouped the universe of industrial facilities affected by storm water regulations into Sectors. The AES-PR activities are covered under Sectors O - Steam Electric Generating Facilities (SIC 4911-Electric Services) and ~~Q -~~ Water Transportation (~~SIC 4491-Marine Cargo Handling~~). The following benchmark monitoring requirements apply to AES-PR under Sectors O:

- Quarterly Benchmark Monitoring (MSGP Part 6.2.1)

Sector- Parameter	Benchmark Monitoring Concentration
O- Total Iron	1.0 mg/L

Does Not Apply

- Annual Effluent Limitations Guidelines Monitoring (MSGP Part 6.2.2)

Sector- Parameter	Effluent Limit
O(Coal Storage Pile Discharges)-TSS	50 mg/L
O(Coal Storage Pile Discharges)- pH	6.0 min - 9.0 max

VI. Storm Water Discharges

There are three (3) storm water outfalls (sampling points) at AES-PR; outfall SP-001 at the marine dock area, outfall SP-002 located at Gate #3 (plant south side entry gate) and SP-003 located at Gate #2 (plant west side entry gate). These outfalls are shown in **Appendix 1**- Storm Water Sampling Locations Map. **Appendix 2** describes the automatic samplers installed at each outfall. The maintenance of the automatic samplers will be included in the Preventive Maintenance Program in the Computerized Maintenance Management System (CMMS). Every six months a PM order will be generated by the CMMS.

VII. Pre-Sampling Activities

Prior to the sampling event, conduct the following preparations:

A. Identify and notify the personnel involved in the sampling;

B. Contact the laboratory to prepare and deliver the sample bottles with any required preservatives, labels and chain-of-custody forms;

C. Verify the operation of the automatic samplers using the guide in **Appendix 3** and availability of alternate manual sampling equipment;

D. Collect Sampling Supplies e.g. disposable gloves, sampling containers, labeled sample bottles, rain gear, field notebook, indelible pens / markers, clipboard, visual monitoring forms, chain-of-custody forms, safety equipment, cooler / ice;

E. Secure transportation vehicle.

VIII. Sample Collection and Assessment

Samples can be taken by automatic samplers (default option) or manually and must be obtained from a storm event that results in an actual discharge (not all rain events will produce a discharge, this will depend on several factors, including soil temperature and moisture content) that follows the preceding measurable storm event (one that is registered by the rain gauge) by at least 72 hours. This determination will be made from the rain gauge data of the AES-PR weather stations; identified in the field as Station 1 and Station 2. The data from Station 2 will be used only if there is a data loss or malfunction of Station 1. Rainfall data is collected according to SOP-Eng-002 "Rainfall Data Collection Management & Recordkeeping Procedure".

The MSGP 2015 requires permittees to obtain in a quarterly basis a grab sample during a rain event. A grab sample is a single sample "grabbed" by filling up a container, either by hand or attached to a pole. Obtaining accurate data is vital to your ability to assess how your stormwater control measures are performing.

The protocol presented below must be followed in order to obtain an accurate manual sample:

- Wear disposable powder-free gloves for sampling; never touch the inside of the lid or bottle.
- For oil and grease: fill the glass sample bottle directly from the discharge; never collect in a container first and then transfer to the sample bottle because oily residue will collect along the inside of the first collection bottle and make the sample inaccurate.
- If you have problems accessing the stormwater discharge point (e.g., access is too far or dangerous), use a pole or other appropriate sampling apparatus.
- Sample only stormwater discharging from your facility (i.e., do not sample from puddles, ponds or retention basins).
- Sample from a turbulent section in the central part of the flow; avoid touching the bottom or sides of the stormwater conveyance.
- Fill the sample bottle nearly to the top (meniscus almost at the rim) by holding the opening into the flow of water; do not rinse or overfill the bottles.

For each monitoring event (during the sampling period in the quarter) the date and duration (in hours) of the rainfall event, rainfall total (in inches) for that rainfall event, and the time (in days) since the previous measurable storm event will be recorded. A minimum of one grab sample must be collected at each outfall within the first 30 minutes (first flush) of discharge from a measurable storm event. This is so because the highest concentrations of pollutants will be discharged during the initial 30 minutes of the discharge.

The process for performing quarterly visual assessments of storm water samples is described in **Appendix 4**. Visual assessment samples must be taken from each outfall, collected in a clean, clear glass, or plastic container, examined in a well-lit area and documented using Worksheet No. 6 of the Storm Water Pollution Prevention Plan. See **Appendix 5**.

The process for performing quarterly benchmark monitoring of storm water sampling is described in **Appendix 6**. Label the benchmark monitoring samples and place them in a cooler partially filled with ice and keep at approximately 39° F until the cooler is picked up by the laboratory.

Complete a chain-of-custody form for the samples and place it in a re-sealable plastic bag inside the cooler. Contact the laboratory for pickup. See **Appendix 7** for a copy of the chain-of-custody form.

IX. Sample Analysis

All required benchmark monitoring analyses must be conducted in accordance with 40 CFR Part 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants" analytical methods and using test procedures with quantitation limits at or below benchmark values for benchmark parameters that AES is required to sample.

X. Review and Reporting

The Environmental Coordinator or Designee is responsible for reviewing and verifying the analytical data and preparing the MSGP Discharge Monitoring Reports (MDMRs). The Plant Manager is responsible for signing and submitting the MSGP Discharge Monitoring Reports (MDMRs) to EPA electronically. MDMRs will be submitted using EPA's NetDMR system (EPA's electronic NPDES eReporting tool) no later than 30 days after receiving the complete laboratory results for all monitoring outfalls for the reporting period.

XI. Follow-up Actions

If as a result of the quarterly visual assessments it is found that any control measures are not being properly operated and maintained or if the average of four (4) quarterly sampling results exceed an applicable benchmark, the Environmental Coordinator or Designee will review the selection, design, installation and implementation of the control measures to determine if modifications are necessary to meet the effluent limits of the MSGP.

In response to any of the above conditions, the Environmental Coordinator or Designee must prepare a corrective action report within 24 hours of discovery documenting the date the problem was identified, describing the problem and the need for a corrective action.

In addition, within 14 days of discovery of any of the above conditions, the Environmental Coordinator or Designee must document the corrective action taken or the basis for not taking corrective action, the date of initiation and completion of the corrective action and if the SWPPP will be modified as a result of the condition(s) identified or the corrective actions taken.

This documentation will be submitted to EPA by the Environmental Coordinator or Designee in an annual report and retained with the SWPPP.

XII. Training

A. The AES Pollution Prevention Team members, designated employees and/or contractors responsible for the performance and/or supervision of storm water sampling must receive classroom and hands-on training on this Procedure.

B. Training in this SOP will be provided prior to conducting a sampling and at least every year following the Training Syllabus in **Appendix 8**.

C. All trainings will be documented using **Appendix 9** – Employee Training Attendance Form.

XIII. References

1- AES Rainfall Data Collection Management & Recordkeeping Procedure. SOP-Eng-002.

2- ISCO Stormwater Monitoring Guide. 2008.

3- United States Environmental Protection Agency (USEPA). NPDES Storm Water Sampling Guidance Document EPA 833-B-92-001. July 1992.

4- USEPA. NPDES Inspection Manual. July 2004.

5- USEPA. Final National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Form Industrial Activities, Federal Register, Vol. 73, No. 189, September 29, 2008.

6- USEPA. Industrial Stormwater Monitoring and Sampling Guide EPA 832-B-09-003 Final Draft. March 2009.

7- 40 CFR 136 Guidelines Establishing Test Procedures for the Analysis of Pollutants.

REVISION HISTORY:

No.	Revision Summary	Date	Reviewer
1	New Document and management approval.	April 13, 2015	Hector Avila / Environmental Coordinator
2	General revision/ no changes	March 23, 2015	Csaba Kiss / Engineering Manager
3	Update document after MSGP 2015 approval. Minor textual changes.	March 01, 2016	Pedro E. Labayen / Storm Water Compliance Coordinator
4	Revision to include EPA August 12, 2016 Water Compliance Inspection comments.	March 29, 2017	Pedro E. Labayen / Storm Water Compliance Coordinator
5			
6			

Appendix 1
STORM WATER SAMPLING LOCATIONS MAP


Sapling Point
SP-003
Sapling Point
SP-002


Sapling Point
SP-001

Appendix 2
AUTOMATIC SAMPLERS

AES PR Storm Water Automatic Samplers

Existing Sampling Equipment Description:

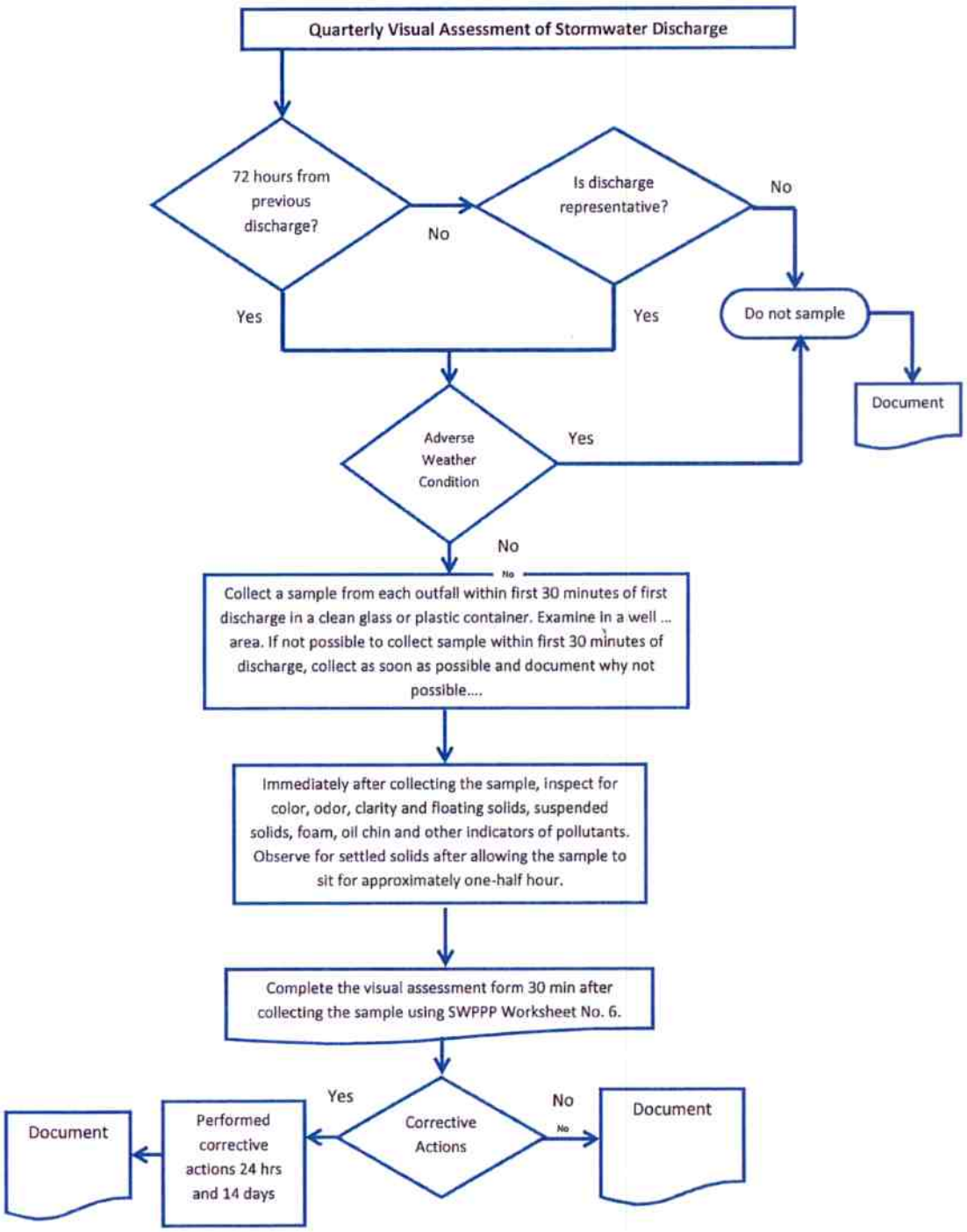
- SP-001
  - Location: Marine Dock Area
  - Manufacturer: ISCO
  - Model: Avalanche Transportable & Refrigerated Sampler
  - Supporting Equipment: 12V Battery, Solar Panel, and Rain Gauge

- SP-002
  - Location: Gate #3 (plant south side entry)
  - Manufacturer: ISCO
  - Model: Avalanche Transportable & Refrigerated Sampler
  - Supporting Equipment: 12V Battery, Solar Panel, Rain Gauge, and Water Level Sensor

- SP-003
  - Location: Gate #2 (plant west side entry road)
  - Manufacturer: ISCO
  - Model: Avalanche Transportable & Refrigerated Sampler
  - Supporting Equipment: 12V Battery, Solar Panel, Rain Gauge, and Water Level Sensor

Appendix 3
AUTOMATIC SAMPLER INSTALLATION AND OPERATION GUIDE

Appendix 4
STORM WATER QUARTERLY VISUAL ASSESSMENT FLOWCHART


Quarterly Visual Assessment of Stormwater Discharge
72 hours from previous discharge?
No
Is discharge representative?
No
Yes
Yes
Do not sample
Document
Adverse Weather Condition
Yes
No
No
Collect a sample from each outfall within first 30 minutes of first discharge in a clean glass or plastic container. Examine in a well ... area. If not possible to collect sample within first 30 minutes of discharge, collect as soon as possible and document why not possible....
Immediately after collecting the sample, inspect for color, odor, clarity and floating solids, suspended solids, foam, oil chin and other indicators of pollutants. Observe for settled solids after allowing the sample to sit for approximately one-half hour.
Complete the visual assessment form 30 min after collecting the sample using SWPPP Worksheet No. 6.
Yes
Corrective Actions
No
No
Document
Performed corrective actions 24 hrs and 14 days
Document

Appendix 5
QUARTERLY VISUAL ASSESSMENT FORM

MSGP Quarterly Visual Assessment Form

Worksheet No. 6

(Complete a separate form for each outfall you assess)

Name of Facility: AES PR NPDES Tracking No.

Outfall Name: "Substantially Identical Outfall"? ☐ No ☐ Yes

Person(s)/Title(s) collecting sample:

Person(s)/Title(s) examining sample:

Date & Time Discharge Began: Date & Time Sample Collected: Date & Time Sample Examined:
Note: Samples must be examined within an hour.

Substitute Sample? ☐ No ☐ Yes (identify quarter/year when sample was originally scheduled to be collected):

Nature of Discharge: ☐ Rainfall ☐ Snowmelt

If rainfall: Rainfall Amount: inches Previous Storm Ended > 72 hours Before Start of This Storm? ☐ Yes ☐ No* (explain):

Parameter

Color ☐ None ☐ Other (describe):

Odor ☐ None ☐ Musty ☐ Sewage ☐ Sulfur ☐ Sour ☐ Petroleum/Gas _____
☐ Solvents ☐ Other (describe):

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other

Floating Solids ☐ No ☐ Yes (describe):

Settled Solids** ☐ No ☐ Yes (describe):

Suspended Solids ☐ No ☐ Yes (describe):

Foam (gently shake sample) ☐ No ☐ Yes (describe):

Oil Sheen ☐ None ☐ Flecks ☐ Globs ☐ Sheen ☐ Slick
☐ Other (describe):

Other Obvious Indicators of Stormwater Pollution ☐ No ☐ Yes (describe):

* The 72-hour interval can be waived when the previous storm did not yield a measurable discharge or if you are able to document (attach applicable documentation) that less than a 72-hour interval is representative of local storm events during the sampling period.

** Observe for settled solids after allowing the sample to sit for approximately one-half hour.

Detail any concerns, additional comments, descriptions of pictures taken, and any corrective actions taken below (attach additional sheets as necessary). Insert details

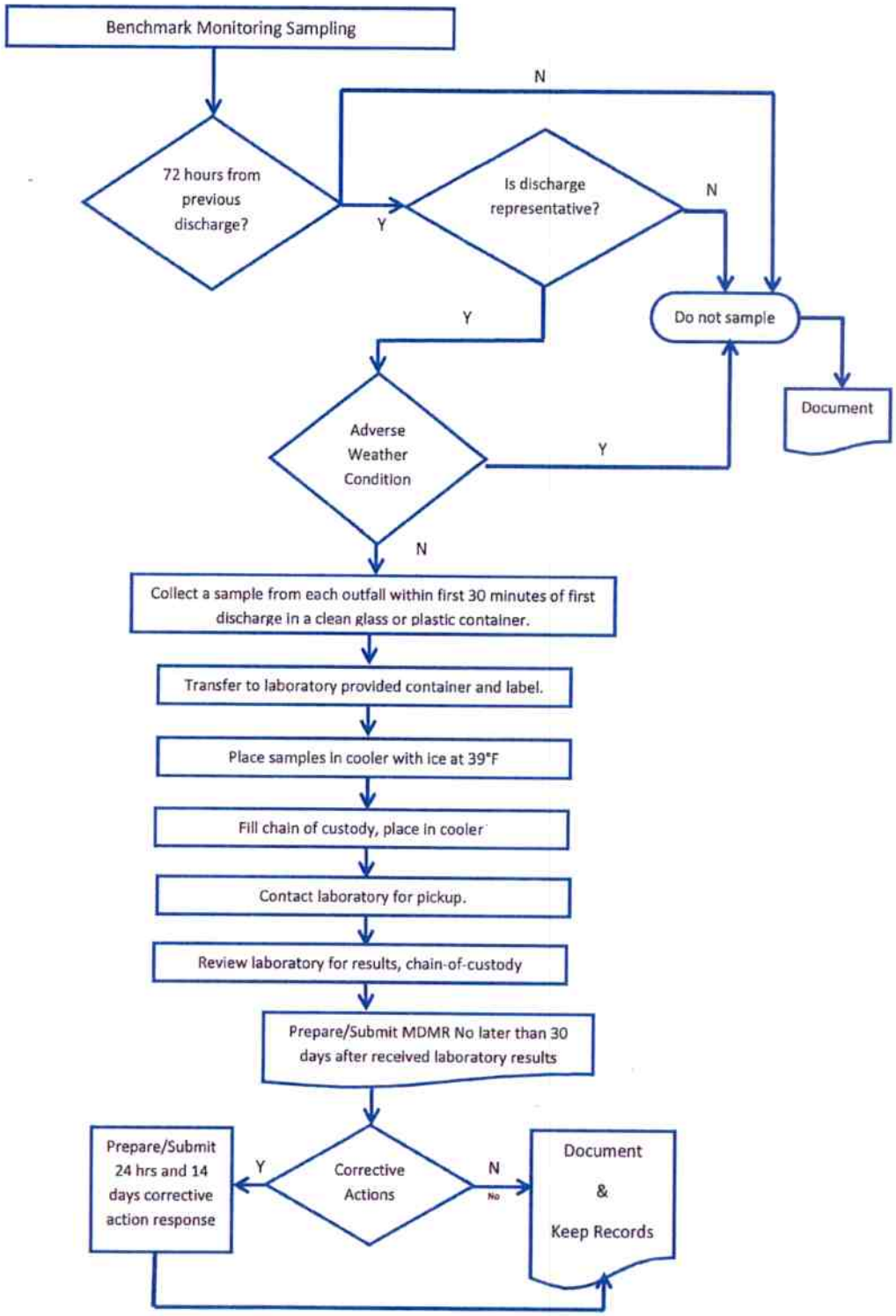
Certification by Facility Responsible Official (Refer to MSGP Subpart 11 Appendix B for Signatory Requirements)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name: B. Title:

C. Signature: D. Date Signed:

Appendix 6
STORM WATER BENCHMARK MONITORING FLOWCHART


Benchmark Monitoring Sampling
72 hours from previous discharge?
N
Y
Is discharge representative?
N
Y
Do not sample
Document
Adverse Weather Condition
Y
N
Collect a sample from each outfall within first 30 minutes of first discharge in a clean glass or plastic container.
Transfer to laboratory provided container and label.
Place samples in cooler with ice at 39°F
Fill chain of custody, place in cooler
Contact laboratory for pickup.
Review laboratory for results, chain-of-custody
Prepare/Submit MDMR No later than 30 days after received laboratory results
Prepare/Submit 24 hrs and 14 days corrective action response
Y
Corrective Actions
N
No
Document & Keep Records

Appendix 7
STORM WATER SAMPLING CHAIN-OF-CUSTODY FORM

BECKTON ENVIRONMENTAL LABORATORIES

192 Villa Street • Ponce, P.R. 00730-4875
Tel. 787-841-7373 • Fax 787-841-7313

REVISION 2009

CHAIN OF CUSTODY RECORD

PROYECT NO.	COMPANY	SAMPLER	
SAMPLE LOCATION/CLIENT ID		TIME	AM / PM
SAMPLE DATE		BEL. NO.	CONTROL NO. 181445

1. General Environmental:		PC	VSS		PC
Acidity	( )		Alkalinity	( )	
Ammonia as N	( )		Bicarbonate	( )	
BOD-5	( )		Bromide	( )	
Chloride	( )		Chlorine, Res.	( )	
COD	( )		Color (ADMI)	( )	
Conductivity µmhos/cm	( )		Color (Pt-Co)	( )	
Dissolved Oxygen	( )		Cyanide	( )	
Hardness	( )		Fluoride	( )	
Moisture %	( )		Iodide	( )	
Nitrite	( )		Nitrate	( )	
Oil+Grease	( )		Nitrate + Nitrite	( )	
Phenol	( )		pH, S.U.	( )	
Phosphorus, Total	( )		Phosphate, Ortho	( )	
Sett Solids mg/L	( )		Sett. Solids mL/L	( )	
Sulfate	( )		Solids. Total	( )	
Sulfite	( )		Sulfide	( )	
TDS	( )		Surfactant	( )	
Temperature, °C	( )		TSS	( )	
TOC	( )		TKN	( )	
Asbestos	( )		Turbidity	( )	
TVS	( )		Carbonate	( )	
Total Nitrogen	( )				
2. Metals:					
Aluminum (Al)	( )		Cadmium (Cd)	( )	
Chromium (Cr)	( )		Copper (Cu)	( )	
Iron (Fe)	( )		Lead (Pb)	( )	
Manganese (Mn)	( )		Mercury (Hg)	( )	
Nickel (Ni)	( )		Selenium (Se)	( )	
Silver (Ag)	( )		Tin (Sn)	( )	
Zinc (Zn)	( )		Arsenic (As)	( )	
Barium (Ba)	( )		Boron (B)	( )	
Antimony (Sb)	( )		Beryllium (Be)	( )	
Bismuth (Bi)	( )		Calcium (Ca)	( )	
Chromium, VI (CrVI)	( )		Cobalt (Co)	( )	
Magnesium (Mg)	( )		Molybdenum (Mo)	( )	
Potassium (K)	( )		Silicon (Si)	( )	
Sodium (Na)	( )		Strontium (Sr)	( )	
Thallium (Tl)	( )		Titanium (Ti)	( )	
Vanadium (V)	( )		Lithium (Li)	( )	
3. RCRA/Hazardous wastes					
Ignitability (Flash Pt.)	( )		Corrosivity	( )	
Reactivity (CN & S)	( )		TCLP	( )	
RCRA Metals	( )		Organics-Pest/Herb	( )	
Organics-BNA	( )		Organics-VOA	( )	
TOX	( )				
4. Specific Organics			Phenols GC	( )	
Volatiles	( )		Semi-Volitiles (BNA)	( )	
Pesticides/PCB's	( )		PCB's Only	( )	
Herbicides	( )		TPH 418.1	( )	
BTEX	( )		TTO	( )	
TTO & Dioxin	( )		TPH 8015	( )	
			Lindane	( )	
5. Microbiology					
Fecal Coliform	( )		Total Coliform	( )	

Comments: _____

Sampling Witness; _____
Date/Time: _____
Relinquished by: _____
Date/Time: _____
Received by: _____
Date/Time: _____
Relinquished by: _____
Date/Time: _____
Received by: _____
Date/Time: _____
Relinquished by: _____
Date/Time: _____
Received by: _____
Date/Time: _____

Matrix

air ( ) water ( ) sludge ( )
liquid ( ) soil ( ) solid ( )
oil ( ) mixed ( ) other ( )

Specify: _____

Preservative Codes = PC

1. Cool, <6° C
2. Sulfuric Acid (H_2SO_4) pH<2
3. Nitric Acid (HNO_3), pH<2
4. Hydrochloric acid (HCl)
5. Sodium Thiosulfate
6. Sodium Hydroxide(NaOH)
7. Zinc Acetate
8. Ascorbic Acid
9. FAS
10. Other

Sample type legend:

grab samples x
composite samples xx

Turnaround time:

1 day ( )
2 days ( )
3 days ( )
5 days ( )

Note: normal turnaround time is ten (10) working days; additional charges apply for rush orders.

Sampling Equipment:

Automatic Sampler ( )
Sample Pick Up ( )

Original

Appendix 8
TRAINING SYLABUS

STORM WATER SAMPLING TRAINING SYLABUS

Subject Category: Compliance with permit requirements

Training Length: 2- 4 hr

Delivery Mode: Lecture, field exercise

Training Instructional Materials / Handouts: Power Point Presentation and Hard Copies

Schedule: Once / year

Training Purpose: Provide information to employees designated to perform storm water sampling activities required by EPA's Multi Sector General Permit

Instructors: AES or contracted

Written Exam: No

Practical Exam: Yes

WEB Resource: www.epa.gov/stormwater

Topics to be covered:

- Storm Water Regulations Overview
- AES Storm Water Management and Discharge
- Location of Storm Water Sampling Points
- Sampling Equipment Operation
- Pre-sampling Activities
- Sample Collection and Evaluation
- Sample Documentation
- Review of Sampling Results
- Reporting and Recordkeeping
- Corrective Actions

Appendix 9
EMPLOYEE TRAINING ATTENDANCE FORM

AES Puerto Rico, LP
Storm Water Pollution Prevention Plan

Appendix 9

Employee Training

Training Date:	
Training Description:	
Trainer:	
Employee(s) trained	**Employee signature**

Training Date:	
Training Description:	
Trainer:	
Employee(s) trained	**Employee signature**

Training Date:	
Training Description:	
Trainer:	
Employee(s) trained	**Employee signature**

ATTACHMENT NO. 22

Cleaning activities and replacement of stormwater grating drain guards

Photo: Cleaning activities using the vacuum truck and water truck at outfall 002.

Date taken: October 25, 2018 9:12 am

Photo: Cleaning activities using the vacuum truck and water truck at outfall 002.

Date taken: October 25, 2018 9:18 am

Photo: Stormwater grating drain guards replacement at outfall 002.

Date taken: October 25, 2018 9:56 am

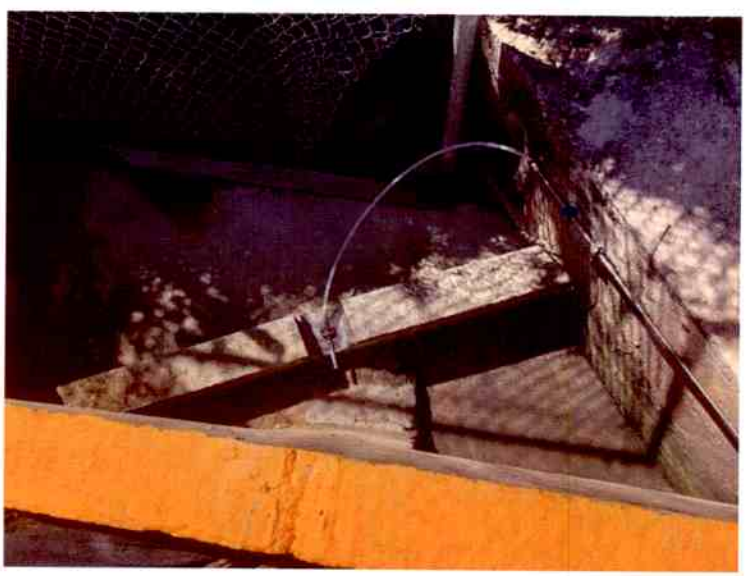


Photo: Outfall 002.

Date taken: October 25, 2018 1:30 pm

ATTACHMENT NO. 23

Revised BMP Matrix

AES Puerto Rico

APPENDIX No.1 - STORM WATER BMP'S MAINTENANCE MATRIX

Task	BMP's	Area	Description	Area Owner	Frequency	Note
			OPERATION			
1	Storm Water concrete swale	East side next to switch yard up to power block area	Remove sediment and gravel accumulation.	OPER	Monthly	
2	Storm Water concrete swale	East side next to power block area (Unit 2)	Remove sediment and gravel accumulation.	OPER	Monthly	
3	Concrete swale	Starting west side of the cooling tower unit Storm Water Pond entrance	Remove sediment and gravel accumulation.	OPER	Monthly	
4	CDS/ESP Area Cleaning	Inside CDS/ESP floor area and between both units.	Maintain the area clean from ash, limestone, hydrated lime and other materials	OPER	Weekly	
5	Power block cleaning	Power block perimeter	Maintain the area clean from ash, refractory, limestone, hydrated lime and other materials	OPER	Weekly	
			COAL COMBUSTION PRODUCTS			
6	Storm Water concrete swale	East side next to urea transfer area until fly/bed ash silos	Remove sediment and gravel accumulation.	CCP	Monthly	
7	Storm Water concrete channel	Start at east side along the Agremax pile until south side were concrete channel connect with the inactive coal pile storm water channel	Remove Agremax, sediment and gravel accumulation.	CCP	Monthly	
8	Storm Water concrete channel	Starting in front of the limestone building until concrete channel front of active coal pile	Remove sediment and gravel accumulation.	CCP	Monthly	
9	Wheel washer	Front of limestone dome	Replace gravel and remove gravel to maintain it operational.	CCP	Weekly	
10	Truck washing area	Before entrance of paved road	Remove sediment and maintain the area stabilized to avoid tracking on paved roads.	CCP	Daily	
11	Gabion wall 10ft buffer zone	Along Agremax pile	Maintain a freeway of 10ft between the gabion wall and Agremax pile.	CCP	Daily	
12	Dust suppression	Agremax pile	Dust suppression from Agremax pile	CCP	Daily	
13	Street sweeper	All paved roads	Use of mechanical street sweeper to remove sediment and silt from road and ditches	CCP	Daily	

14	Street water suppression	All paved roads	Use of water truck to wet paved street to avoid fugitive dust.	CCP	Daily	
15	Grating	Next to guard shelter at gate #3	Remove sediment and gravel accumulation.	CCP	Monthly	
16	Grating	Next to Fly/Bed Ash silos	Remove sediment and gravel accumulation.	CCP	Weekly	
17	Grating	At sample point 002	Remove sediment and gravel accumulation.	CCP/ENV	Monthly	
			MATERIAL HANDLING			
18	Storm Water concrete channel	South west concrete channel bordered the inactive coal pile until sediment trap.	Remove coal, sediment and gravel accumulation.	MH	Monthly	
19	Storm Water concrete channel	Starting in front of the active coal pile until sediment trap	Remove coal, sediment and gravel accumulation.	MH	Monthly	
20	Replacement supersilt fence membrane	Along Inactive Coal Pile	Inspect and replace membrane as needed.	MH	Quarterly	
21	100 yr. Diversion Channel Cleaning	From north side of the cooling tower until wetland.	Clean and remove sediment and vegetation from the channel.	MH	Annually	
22	Sediment trap cleaning	Coal pile runoff pond	Remove all sediment retained.	MH	Quarterly	
23	Coal transfer dust suppression	Active coal pile	Maintain water suppression to avoid fugitive dust during coal transfer to active pile.	MH	Every Transfer	
24	Marine Dock Area Cleaning	Marine Dock area	Clean the marine dock area each time coal/agremax transfer finish	MH/CCP	Every Transfer	
25	Conveyor coal transfer inspection	Conveyor transfer system from dock area to active piles.	Maintain all conveyor cover and close all transfer houses doors.	MH/CCP	Every Transfer	

			MAINTENANCE			
26	Coal pile runoff pond sediment assessment	Coal pile runoff pond	Measure amount of sediment and determine if cleaning is needed.	MAINT/ENV	Annually	
27	Storm water pond sediment assessment	Storm water pond	Measure amount of sediment and determine if cleaning is needed.	MAINT/ENV	Annually	
28	Storm water sampler equipment maintenance	SP-001 (Marine Dock Area), SP-002 (Gate #3) and SP-003 (100 yr. Diversion Channel Outfall)	Storm Water Sampling equipment components verification and maintenance as needed.	MAINT/ENV	Quarterly or before rain event	
29	Replacement of catch basin inlet protection filters	Various (SWB-06, SWB-09 and SWB-10)	Replace catch basin inlet protection.	MAINT/ENV	Quarterly	
30	Unpaved road gravel stabilization	Around the plant	Stabilize all unpaved roads and areas with gravel.	MAINT/ENV	Semiannualy	
			SHARED SERVICES			
32	Off Site concrete channel	North side of the plant property until guard shelter.	Remove sediment, gravel and landscape material accumulation.	WAREHOUSE	After each maintenance	Landscape Contractor perform work
33	Off Site concrete channel	West side of the plant property until head wall	Remove sediment, gravel and landscape material accumulation.	WAREHOUSE	After each maintenance	Landscape Contractor perform work
34	Concrete ditch	Starting at Admin building parking until maintenance shop	Remove sediment and gravel accumulation.	WAREHOUSE	Monthly	
35	Earth ditch	From east side of the property until Outfall 002 head wall	Landscape maintenance.	LANDSCAPE CONTRACTOR	Monthly	
36	Earth ditch	From heavy equipment shop until 100 yr. channel outfall	Landscape maintenance.	LANDSCAPE CONTRACTOR	Monthly	
37	Maintain waste container with roll up cover	Waste containers areas	Roll up covers installation at waste containers for scrap metal, regular waste and vegetation waste.	WAREHOUSE	Daily	
38	Sample point maintenance	SP-001 (Marine Dock Area), SP-002 (Gate #3) and SP-003 (100 yr. Diversion Channel Outfall)	Maintain sample point in compliance with the MSGP	MAINT/ENV	Weekly	Landscape Contractor perform work

WATER TREATMENT						
39	Cooling tower foam inspection	Cooling tower east and west sides.	Inspect for foaming formation and possible overflow.	WT	Daily	
40	Water treatment sludge containers	Water treatment area	All sludge containers should be maintained inside secondary containment	WT	Daily	
41	Grating	Back of water treatment plant	Remove sediment and gravel accumulation.	WT	Monthly	

ATTACHMENT NO. 24

Installation of new geotextile material
over the gabion structure

September 26, 2018

Photo: Geotextile material placed over the gabion structure.

Date taken: October 19, 2018 9:44 am

Photo: Geotextile material placed over the gabion structure.

Date taken: October 19, 2018 9:44 am

ATTACHMENT NO. 25

Cleaning Activities-Diesel Tank Secondary Containment

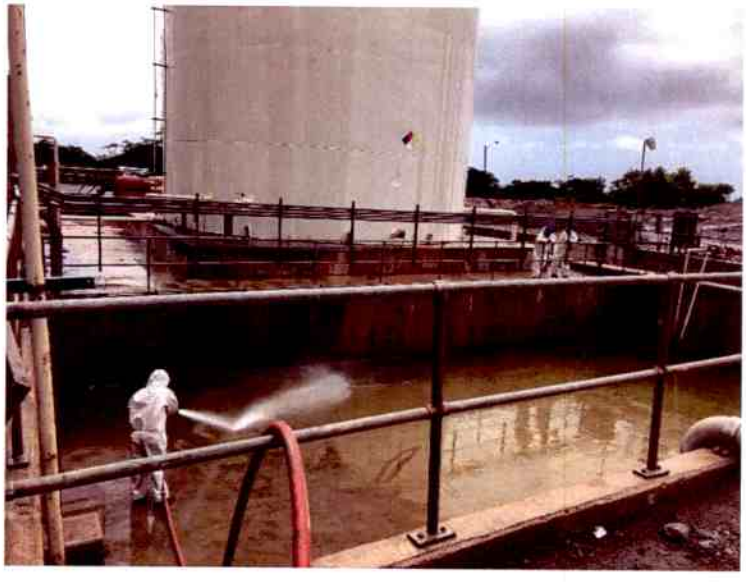


Photo: Cleaning activities at the Diesel Secondary Containment.

Date taken: October 5, 2018 4:50 pm

Photo: Cleaning activities at the Diesel Secondary Containment.

Date taken: October 5, 2018 5:21 pm

Photo: Diesel Secondary Containment.

Date taken: October 8, 2018 8:49 am

Photo: Pump Installation at the Diesel Secondary Containment.

Date taken: October 25, 2018 1:25 pm

ATTACHMENT NO. 26

Installation of gravel and stormwater bags, replacement of drain guard at inlet and cleaning activities

Photo: Gravel installed for erosion control at excavation area.

Date taken: October 25, 2017 2:54 pm

Photo: Gravel installed for erosion control at excavation area.

Date taken: October 25, 2017 2:54 pm

Photo: Cleaning activities performed at the stormwater inlet and road located west of the limestone silos.

Date taken: October 26, 2017 9:02 am

Photo: Stormwater drain guard installed at the inlet located west of the limestone silos.

Date taken: October 26, 2017 9:02 am

Photo: Stormwater stone bags installed at the inlet located west of the limestone silos.

Date taken: October 26, 2017 9:07 am

ATTACHMENT NO. 27

Revised Dust Control Plan

Title:

Coal Combustion Residuals and Agremax™ Dust Control Plan

Approvals:

	Signature	Date
Approved by:		
Manuel Mata Plant Manager	_____	_____
Reviewed by:		
Carlos M. Gonzalez CCP Team Leader	_____	_____
Hector Avila Environmental Coordinator	_____	_____
Elias Sostre Operations Manager	_____	_____

Distribution List:

1. CCP Area
2. Material Handling
3. Environmental Coordinator
4. Operations & Maintenance Area
5. Plant Manager

Table of Contents

Appendices

1 Purpose

This Standard Operating Procedure (SOP) identifies methods to prevent, reduce or mitigate fugitive dust from the coal combustion residuals (CCRs) and Agremax™ handling activities at the AES-PR site.

The primary purpose of this SOP is to explain how the requirements in Section 2.1.2.12 of the US Environmental Protection Agency's (EPA) 2015 Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity (2015 MSGP) - Dust Generation and Vehicle Tracking of Industrial Materials; and the Standards for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule) of April 17, 2015 will be implemented and monitored at AES-PR.[1]

2 Scope

The Coal Combustion Residuals and Agremax™ Dust Control Plan (Plan) described in this SOP addresses fugitive dust emissions (i.e., emitted from any source other than a stack or chimney) from coal combustion residuals (ash) and Agremax™ handling equipment and operations which are non-point sources and area sources within the AES-PR property boundaries as shown in Appendix 1. It does not address particulate or gaseous emissions from point or other sources regulated under the facility's air emission permit issued in accordance with the provisions of Part VI of the Regulation for the Control of Atmospheric Pollution (RCAP) and the Code of Federal Regulations, Title 40 Part 70.

[1] AES Puerto Rico's temporary storage of its inventory of manufactured aggregate is not subject to the CCR Rule, 40 C.F.R. Part 257. Nonetheless, as a protective measure, AES Puerto Rico has prepared this Plan and taken other steps to satisfy CCR Rule requirements applicable to CCR landfills. By undertaking these measures, AES Puerto Rico does not admit its facility is a CCR landfill covered by the CCR Rule and expressly preserves all rights and defenses.

It identifies sources of fugitive dust, outlines the techniques and practices for detecting, monitoring, controlling, minimizing and preventing dust emissions, provides procedures to handle citizen complaints, employee training program guidelines to help them recognize potential sources of dust and the management practices to prevent and control them, identifies the persons and procedures responsible for control equipment availability / operation and maintenance and identifies the inspection / recordkeeping / reporting / notification practices that will be followed.

3 Responsibilities

- The AES-PR Coal Combustion Products (CCP) and Material Handling (MH) leaders are the dust control site coordinators responsible for the implementation of this SOP, including: reading and understanding it, ensuring that all employees / workers / subcontractors know and understand their dust control responsibilities, monitoring the worksite for compliance with the requirements of this SOP, designing watering schedules, ensuring that adequate watering capability is available, determining when to use standby controls when primary controls are ineffective, determining when to cease and start operations, maintaining records and revising the SOP as necessary, including when the primary and standby or contingency controls don't result in effective control.

- The Shift Team Leaders and the CCP/MH Operators are responsible for controlling their operational areas to minimize dust generation. This includes limiting or stopping operations during high winds and/or visible dust plume conditions that cannot be controlled.

- The CPH/MH Operators are responsible for enforcing the requirements of this SOP and notifying the dust control site coordinator or Shift Team Leader of any visible dust plumes which require immediate attention, including those that cross the site boundary. The

operational activity that caused the emission will be ceased temporarily until a re-evaluation of the dust control measures is completed and additional controls are identified and implemented, if needed.

- All dust control equipment i.e., water truck, vacuum truck, sprinklers, hoses, will be maintained in good operational order by the responsible areas. The water truck will be the responsibility of MH, the vacuum truck by CCP; all other controls will be the responsibility of the Maintenance Area. Each area will document and maintain records of how frequently equipment maintenance is done and of all equipment malfunctions and downtimes.

4 Safety Precautions

All AES-PR employees and contractors must use the safety and personal protective equipment required for conducting the activities described herein, including but not limited to hard hats, safety glasses, harness, life preservers and other, as appropriate.

5 Dust Emission Sources

The potential dust emission sources covered by this Plan are located at the southeast quadrant of the plant site and the marine dock. See Appendix 1.

Fly ash and bottom ash are produced by the coal combustion process and stored in two elevated silos. The dry ash is transferred from the silos directly into totally-enclosed bulk trailers for transport by public highway to off-site users.

Agremax™ is a manufactured aggregate produced by AES-PR using its own CCRs. Dry ashes that are not delivered to off-site users are mixed in a pug mill conditions this CCR to produce

Agremax™ with enough moisture to prevent wind dispersal without producing free liquids before feeding a conveyor belt used to transfer the mixture to an open stockpile area where it is also kept wet by the application of water sufficient to prevent dispersal by wind (without producing free liquids) before feeding a conveyor belt used to transfer the mixture to an open Stockpile Area at the facility where it is also kept wet by the application of water sufficient to prevent dispersal by wind (without producing free liquids) before it is spread by a bulldozer. A stockpile[2] to store the inventory of Agremax™ is formed by a bulldozer or by dump trucks that are loaded with Agremax™ by an excavator or front-end loader, and the trucks then place the Agremax™ onto a stockpile. From the Stockpile Area, the Agremax™ is loaded by an excavator or front-end loader into dump trucks, covered, and sent for transport by public highway to off-site users or for disposal. Alternatively, the Agremax™ can be fed by a bulldozer into a crusher located in the Stockpile Area. The crusher feeds an enclosed conveyor to transfer the Agremax™ to marine vessels in the dock area for shipment overseas. Dust can be generated from the ash-Agremax™ transfer operations, truck loading and unloading, crusher loading, from paved and unpaved haul roads within the site, and from the Stockpile Area.

6 Controls

The main equipment and structures used for controlling dust emissions include a water truck with rear spray nozzles and front water cannon, a vacuum truck, mobile water sprinkler guns, large water hoses, fixed water spray nozzle systems / articulated telescoping spouts at drop and loading / shipping areas, a truck wheel cleaning station and curved- paved haul roads.

[2] AES-PR currently maintains two separate Agremax™ stockpiles. These two stockpiles are located in the Stockpile Area behind the plant. One stockpile includes the Agremax™ inventory produced and stored before October 17, 2015. The second stockpile has Agremax™ inventory produced on or after October 17, 2015. Each stockpile will be covered by this SOP.

In addition to the use of the equipment and structures described above, primary (first approach) and contingency (standby or backup strategy) control measures are used to control the generation of dust emissions. Refer to the flowchart in Appendix 2.

Primary controls include initial and annual personnel training, a daily operational inspection checklist to monitor the implementation and effectiveness of the control measures, daily evaluation of weather forecast and real-time instrumental monitoring of weather conditions (precipitation, wind speed-direction [refer to AES Rainfall Data Collection Management & Recordkeeping Procedure. SOP-Eng-002]), daily nighttime watering of stockpile surfaces and pre-shift watering of haul roads, daily log of water truck use, covered transfer conveyors, continuous observation of visible dust emissions (VDE), daily hosing / cleaning of paved roads, maintenance / repair of paved road surfaces, immediate cleanup of track-out and material spillage onto paved roads, prohibited use of blower devices or dry rotary brushes or brooms, enforcement of posted vehicle and moving equipment speed limits to 10 miles per hour (mph) or less , traffic restrictions, minimization of drop distances at transfer points, loading of trucks to prevent their contents from dropping/leaking/ blowing or otherwise escaping, sweeping or spray-cleaning and covering dump trucks prior to leaving the facility, 6-inch minimum bed freeboard clearance requirements for loading dump trucks, surface roughening-compaction of stockpile surfaces, placing stockpile ridges at right angles to prevailing winds, conducting loading and unloading activities on the downwind side of a stockpile, watering of exposed areas before forecasted high winds, restriction or termination of a stockpile disturbance and hauling activities during high-wind conditions (i.e., 25 miles per hour or higher) and scheduled washing of mobile equipment.

At the start of each shift or material handling equipment startup and at least twice daily, the CPH/MH Operators will assess the operational status of all controls and record such assessments using the Dust Control Inspection Checklist in Appendix 3 which will be used to

monitor the implementation and effectiveness of the control measures. Water truck operations may be curtailed during wet weather if the CPH/MH Operators confirm that the Agremax™ is sufficiently wet as to not require further wet abatement (one inch of precipitation is equivalent to an application of 5.6 gallons of water per square yard). These determinations will also be recorded in the Dust Control Inspection Checklist.

If after the implementation of primary control measures, visible dust emissions persist, contingency control measures including daytime wetting of the stockpiles with sprinklers, applying chemical dust suppressants, surfacing of unpaved haul roads with aggregate cover / aprons and restriction /termination of activities will be implemented. Because the control effectiveness of chemical dust suppressants depends on the dilution rate, the application rate, time between applications, size/speed / amount of traffic and meteorological conditions any chemical dust suppressants used will be applied according to the manufacturer's instructions.
If primary and contingency controls don't result in effective control, this SOP must be revised.

The dust type / source and the primary control measures used for each source can be described as follows:

6.1 Agremax™ and Ash in Paved Haul Roads

Description: Emissions can be generated from uncovered truck beds, spillage from haul trucks, vehicle dust carryout and track out. Wind and traffic, including plant (front end loaders, trucks and trailers) and customer vehicles, re-suspend the deposited material creating secondary sources of dust emissions. The average vehicle weight is highly variable, ranging from small pick-up trucks (1 ton) to large trucks / trailers (30 tons).

Control Methods and Equipment: Wet suppression by water truck with rear water sprinklers and water cannon, daily pavement cleaning with water hoses and vacuum truck, speed limit

restrictions to 10 mph or less posted along haul route, immediate cleanup of material spillages, dump truck freeboard / cover, wheel washing and hosing at fixed station, curved shoulders and pavement surface repair as needed.

Frequency of Application: At the beginning of the work shift, whenever fugitive dust plumes are observed and as required to keep road surfaces wet, clean and structurally sound.

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.2 Agremax™ in Stockpile Roads

Description: Emissions can be generated from wind erosion of uncovered truck beds and road surfaces and heavy equipment traffic (bulldozer, excavator, front end loader, trucks and trailers).

Control Methods and Equipment: Daytime wet suppression by water truck with rear water nozzles and water cannon, vehicle speed limits to 10 mph or less, dump truck freeboard / cover.

Frequency of Application: At the beginning of the work shift, whenever fugitive dust plumes are observed and as required to keep road surfaces wet.

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.3 Agremax™ in Stockpile

Description: Agremax™ is a cementitious aggregate material which forms a surface crust resulting in limited fugitive dust emissions when stored. Emissions may be generated from the initial Agremax™ conveyor drop discharge into the Stockpile Area, pushing by heavy equipment to create a stockpile, loading and unloading of dump trucks to remove or add Agremax™ to a stockpile and for off-site transportation, pushing Agremax™ into the crusher feeding the conveyor to the dock and from wind erosion of stockpile surfaces.

Control Methods and Equipment: Nighttime wet suppression of stockpile surfaces by mobile sprinkler guns (10), daytime wet suppression of stockpile surfaces by water truck with water cannon, fixed water spay nozzles at conveyor drop discharge point, reduced drop heights for truck loading, hose wetting of crusher feed and dump truck unloading , surface roughening - compaction of stockpile surfaces with bulldozer, stockpile ridges at right angles to prevailing winds, confining loading and unloading to downwind side of stockpile, watering of exposed areas before forecasted high winds. Windbreaks and enclosures are not practical controls for the Stockpile Area because of its size and continuous change in shape.

Frequency of Application: At the beginning of the work shift, and as required to keep stockpile surfaces crusted.

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.4 Ash Transfer to Bulk Trailers

Description: Fugitive dust emissions may be generated during the chute connection and disconnection steps required for loading ash from the elevated storage silos into bulk trailers for off-site transportation.

Control Methods and Equipment: Discharge drop height control using articulated- telescopic loading spout, enclosed loading area, wet suppression with water spray nozzles at west side of loading bay, truck- trailer cleaning with water hose before leaving the loading bay.

Frequency of Application: Each loading

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.5 Agremax™ Dump Truck Loading and Unloading

Description: Dust emissions may be generated during the loading of Agremax™ into dump trucks to create a stockpile or for off-site transportation and during unloading of dump trucks into a stockpile.

Control Methods and Equipment: Daytime wet suppression by water truck with rear water nozzles and water cannon or large hoses, front end loader and excavator discharge drop height reduction.

Frequency of Application: Each loading

Monitoring: Twice Daily

Recordkeeping: Dust Control Inspection Checklist

6.6 Agremax™ Conveyor Loading and Transfer

Description: Dust emissions can be generated by wind blowing over the elevated conveyor used to transfer Agremax™ to marine vessels at the dock area and when it is discharged into the vessel's holding compartment.

Control Methods and Equipment: Covered conveyors, discharge drop height control with articulated- telescopic loading spout.

Frequency of Application: Each loading

Monitoring: Twice Daily (During Vessel Loading)

Recordkeeping: Dust Control Inspection Checklist

7 Citizen Complaints and Corrective Actions

Citizen complaints claiming CCR fugitive dust events at AES-PR will be documented using the Citizen Complaints Log in Appendix 4 so they can be investigated by the Environmental staff. Because CCR dust events may be short-term and visual observations will probably be required, expeditious attention will be provided to these events. If the origin of the complaint is determined to be due to CCR fugitive dust, then corrective and follow-up actions will be identified and included in the Log. This Log of Citizen complaints and a summary of corrective actions taken, if any, will be kept for use in the preparation of the Annual Fugitive Dust Control Report described below.

8 Training

To ensure that the dust control practices are followed, AES-PR will conduct an employee awareness training that will include all applicable dust control measures and the importance of compliance. Records of the trainings will be maintained, including the sign-in sheets.

- The designated employees and/or contractors responsible for the performance and/or supervision of dust control activities must receive initial and yearly classroom and hands-on training on this SOP.

- Training in the requirements of this SOP will be provided prior to commencing duties at the affected areas and at least every year following the Training Syllabus in Appendix 5.

- All trainings will be documented using the Employee Training Attendance Log in Appendix 6.

9 Inspections, Reports and Corrective Actions

In addition to the twice-daily inspections described above, AES-PR will perform weekly inspections by a qualified person to identify conditions with the potential to disrupt operations or safety of the CCR inventory stored in the Stockpile Area. The inspections will be documented using the form in Appendix 7.

AES-PR will prepare an Annual CCR Fugitive Dust Control Report that includes the following:

- Descriptions of actions taken to control CCR fugitive dust
- A record of all citizen complaints and a summary of any corrective actions taken

Finally, AES-PR will engage a qualified professional engineer to prepare an Annual Inspection Report addressing geometry changes, approximate volume, structural weaknesses, existing conditions and any other changes that can disrupt the Stockpile's operation, safety or stability.

10 Recordkeeping

All versions of this Plan, the annual CCR Fugitive Dust Control Reports, documentation detailing corrective measures, weekly and annual inspections will be kept in the facility's operating record as they become available.

All information related to this SOP will be kept for three years after the expiration of the site's industrial storm water discharge permit under the 2015 MSGP or five years following the date on which it was prepared, whichever is later.

11 Internet Requirements and Notifications

AES-PR will ensure the Puerto Rico Environmental Quality Board is notified of the availability of the Plan, including any subsequent amendments, and of the availability of the Annual CCR Fugitive Dust Control Report, as provided in the CCR Rule. AES-PR will also ensure the most recent version of the Plan and Annual CCR Fugitive Dust Control Report is posted on a publicly-accessible internet site (CCR Web site) for the AES-PR facility, as provided by the CCR Rule.

12 Licensed Professional Engineer Certification

This Dust Control Plan was prepared following the guidelines of 40 CFR 257.80 to cover the needs of the AES Puerto Rico facility located at Km. 142.0 State Road PR-3, Jobos Ward, Guayama, PR.

I, Winston R. Esteves, a Puerto Rico licensed Professional Engineer, certify that:

- I am familiar with the requirements of 40 CFR 257.80;
- I have visited and examined the AES Puerto Rico, facility;
- This Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of the CCR rule;
- Procedures for required inspections have been established; and
- That this Plan is adequate for the facility.

This certification in no way relieves the owner or operator of the facility of the duty to fully implement this Fugitive Dust Control Plan. This Plan is only valid to the extent that the facility owner or operator maintains, tests and inspects controls, equipment, and other devices as prescribed herein. I did not test for proper operation of any equipment, devices, control systems or any other equipment systems not specifically mentioned.

Winston R. Esteves, PE

10/25/18
Date

8827
License Number

8/31/19
License Renewal Date

P.E. Seal

13 Periodic Plan Assessment and Amendments

The effectiveness of this Plan will be assessed to determine if updates or amendments are necessary after reviewing the Annual Fugitive Dust Control Report, the Annual Inspection Report and whenever there is a change in conditions that would substantially affect it e.g. construction and operation of a new CCR unit, significant increases in quantities of CCR managed, changes in CCR handling / storage practices or modifications to CCR handling / storage equipment. All technical amendments to this SOP will be certified by a Professional Engineer.

A record of the amendments made to this SOP is included below.

Record of Amendments

Date of Amendment	Amended Sections or Topics	Amendments Made By
---	Original document prepared in August 2015.	---
September 19, 2016	Addition of CCR Rule Provisions for Fugitive Dust.	Winston R. Esteves, PE
October 25,2018	Addition of alternative BMP for paved roads.	Winston R. Esteves, PE

14 References

1- AES Rainfall Data Collection Management & Recordkeeping Procedure. SOP-Eng-002.

2- Air & Waste Management Association. Air Pollution Engineering Manual. 2000.

3- California Stormwater Quality Association. California Stormwater BMP Handbook-Construction. Wind Erosion Control WE-1. May 2011.

4- Noyes Data Corporation. Dust Control Handbook. Pollution Technology Review No. 161. 1988.

5- US Department of Health and Human Services. Dust Control Handbook for Industrial Minerals Mining and Processing. January 2012.

6- United States Environmental Protection Agency (USEPA). Emission Control Technologies and Emission Factors for Unpaved Road Fugitive Emissions. EPA 625/5-87-022. September 1987.

7- USEPA. Control of Open Fugitive Dust Sources. EPA 450/3-88-008. September 1988

8- USEPA. AP-42 Compilation of Air Pollutant Emission Factors. Volume 1: Stationary Point and Area Sources. Chapter 13: Miscellaneous Sources. January 1995.

9- USEPA. Storm Water Management Fact Sheet- Dust Control EPA 832-F-99-003. September 1999.

10- USEPA. Final National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Form Industrial Activities, Federal Register, Vol. 73, No. 189, September 29, 2008.

11- USEPA. Water: Best Management Practices; Dust Control. Source: http://www.epa.gov/polwaste/npdes/swbmp/Dust-C. Web Page last updated on Tuesday, July 1, 2014; Accessed and printed on March 27, 2015. [4 pages]

12- USEPA. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule 80 FR 21301-21501. April 17,2015

Dust Control Checklist

Control Equipment

Skipper Sprinkler Guns (8)	_____ Operational	_____Not Operational
Vacuum Truck (1)	_____ Operational	_____Not Operational
Broom Sweeper (1)	_____ Operational	_____Not Operational
Large Water Hoses ( )	_____ Available	_____Not Available

Paved Haul Roads

Surface in Good Condition	_____ Yes	_____ No
Wet Surfaces	_____ Yes	_____ No
Blowers or Dry Sweeping Used	_____ Yes	_____ No
Visible Emissions	_____ Yes	_____ No
Visible Speed Limit Signs Posted	_____ Yes	_____ No
Spilled Materials	_____ Yes	_____ No
Tracked Sediments	_____ Yes	_____ No
Wheel Washer Station	_____ Yes	_____ No
- Adequate Water level	_____ Yes	_____ No
- Adequate Aggregate Depth	_____ Yes	_____ No
- Aggregate Surface Clean	_____ Yes	_____ No

Haul Trucks

Within Speed Limits	_____ Yes	_____ No
Within Established Routes	_____ Yes	_____ No
Covered with Tarp	_____ Yes	_____ No

Free of Debris	_____ Yes	_____ No
Adequate Freeboard	_____ Yes	_____ No
Low Loading Drop Height	_____ Yes	_____ No

Unpaved Haul Roads

Wet Surface	_____ Yes	_____ No
Aggregate Cover	_____ Yes	_____ No
Over Watering Observed	_____ Yes	_____ No
Road Erosion Observed	_____ Yes	_____ No
Visible Emissions	_____ Yes	_____ No

Conveyors

Silos to Stockpile Fully Enclosed	_____ Yes	_____ No
Stockpile to Dock Silos Fully Enclosed	_____ Yes	_____ No
Water Applied at Conveyor Drop Point	_____ Yes	_____ No
Water Applied at Crusher Feed	_____ Yes	_____ No
Visible Emissions	_____ Yes	_____ No

Fixed Transfer Points

Silos to Stockpile Water Sprays Operational	_____ Yes	_____ No
Stockpile Crusher Feed Wet	_____ Yes	_____ No
Conveyor to Marine Vessel Telescoping Spout Operational	_____ Yes	_____ No
Silos to Bulk Trailers		

Telescoping Spout Operational	_____ Yes	_____ No
Leak Proof Spout Connection	_____ Yes	_____ No
Ash Silos Water Curtain Operational	_____ Yes	_____ No

Agremax Stockpile

Wet Stockpile Surfaces	_____ Yes	_____ No
Water Sprays Overlap	_____ Yes	_____ No
Chemical Dust Suppressants Used	_____ Yes	_____ No
Activities on downwind side	_____ Yes	_____ No
Slope Surface Roughening /Compaction	_____ Yes	_____ No
Ridges at Right Angles to Prevailing Winds	_____ Yes	_____ No
Slope Erosion Observed	_____ Yes	_____ No
Visible Emissions	_____ Yes	_____ No

Wind Speed_____ **Wind Direction**_____

Comments:_____

_____

_____

_____

_____

_____

_____

Name / Signature_____

Date_____ Time_____

ATTACHMENT NO. 28

Gravel installation at the dirt road entrance

Photo: Gravel installation at the dirt road entrance to the cooling towers.

Date taken: October 26, 2018 9:03 am

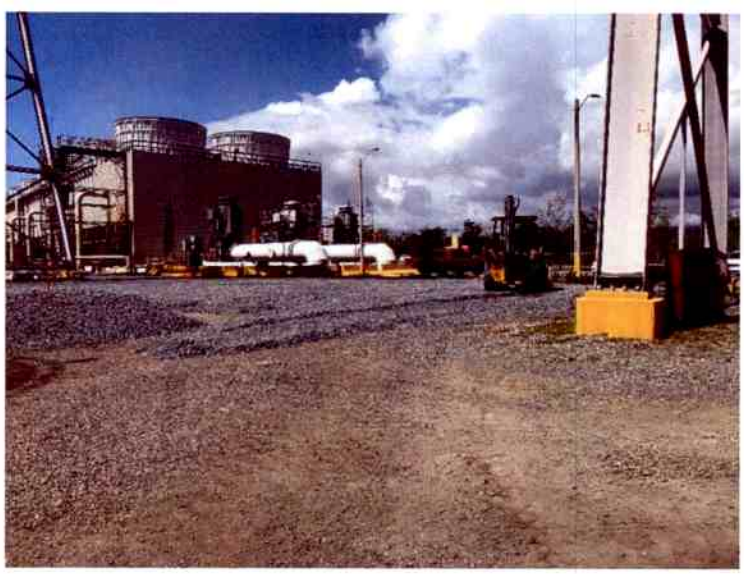


Photo: Gravel installation at the dirt road entrance to the cooling towers.

Date taken: October 26, 2018 12:28 pm

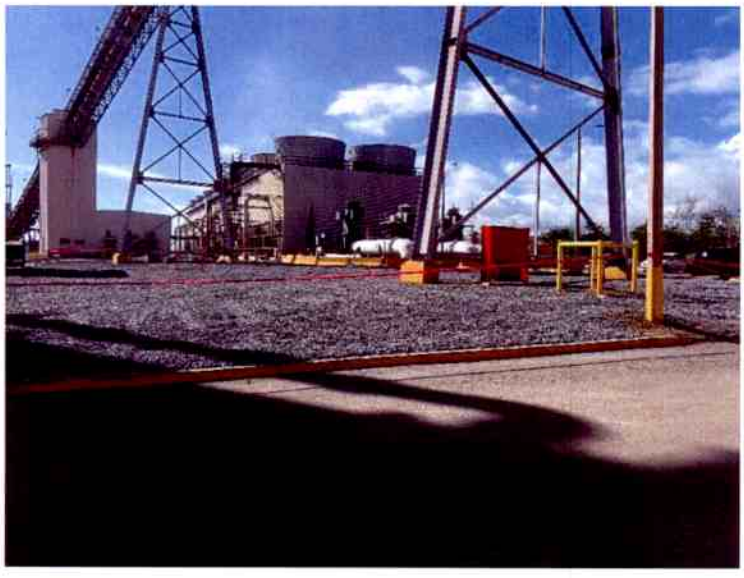


Photo: Gravel installation at the dirt road entrance to the cooling towers.

Date taken: October 26, 2018 3:13 pm

Photo: Gravel installation at the dirt road entrance to the cooling towers.

Date taken: October 26, 2018 3:13 pm

Photo: Gravel installation at the dirt road entrance to the cooling towers.

Date taken: October 26, 2018 3:14 pm

Photo: Gravel installation at the dirt road entrance to the cooling towers.

Date taken: October 26, 2018 3:15 pm

Photo: Gravel installation at the dirt road entrance to the cooling towers.

Date taken: October 26, 2018 2:28 pm